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Mobilising Knowledge in Public Health: Analysis of the Functioning of the Scottish Public Health Network

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Declaration

I declare that the Doctor of Education thesis entitled *Mobilising Knowledge in Public Health: Analysis of the functioning of the Scottish Public Health Network* is, except where otherwise indicated, my own work. This thesis contains no material that has been submitted previously, in part or whole, for an award or any academic degree or diploma.

Signature…….

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ABSTRACT

The extent to which the knowledge mobilisation potential of public health networks is actually achieved in their functioning has not been previously studied. There are prescriptions from policy documents and from research literature as to the form networks in health should take and the way they should operate. However, there has been little research connecting the nature of the networks and the manner in which they function to their knowledge mobilising ability. Constituted in 2006, the Scottish Public Health Network (ScotPHN), which is the primary vehicle in Scotland for mobilising public health knowledge and informing policy and practice, constitutes the location for this study investigating this knowledge mobilisation and how networks function in public health.

Feedback from the consultation conducted prior to the formation of ScotPHN was obtained. Interviews were conducted with the members of the ScotPHN steering group, a project group and the stakeholder group. Two ScotPHN steering group meetings were also attended by the author as an observer. The consultation feedback, transcripts of the interviews and those of steering group meetings were analysed using the constructivist version of the grounded theory approach. The process involved coding and abstracting codes to categories and themes. The emerging themes were reviewed in the light of existing literature on networks and knowledge mobilisation. These themes were then used to develop a model to understand how the network operates and consequently mobilises knowledge.

The study shows that prior to its formation ScotPHN was expected to address the fragmentation of the public health workforce; significantly enhance links amongst existing public health networks; support ground level knowledge exchange amongst practitioners and significantly enhance multisectorial working. None of these expectations appear to have been met. ScotPHN has, however, managed to fill the gap left by the demise of the Scottish Needs Assessment Programme (SNAP). ScotPHN's structure and the manner in which it is controlled lead to it being akin to a policy community rather than an issue network. The generic public health concerns of the steering group and the selective nature of the project group prevent it from functioning as an issue network. The dominance of people from the medical profession also causes a social closedness in the ScotPHN steering group. The limited multisectorial participation in its activities results in: a lack of constructionist learning; limited inclusion of the social context of knowledge; and a deficit of Mode 2 knowledge mobilisation. In the context of knowledge conversion there is some evidence of externalisation but no socialisation. ScotPHN is not a network that can be classed as a community of practice.

This study highlights how health policies, which have advocated the establishment of networks, could derive considerable guidance from research into how networks actually function. With respect to the knowledge mobilisation activity of these networks the study finds that top-down and prescribed structures are unable to capture the transdisciplinarity and diverse intellectual frameworks that contribute to public health knowledge. It is seen that the hierarchical network structures can undermine the engagement of actors from the less represented sectors. Additionally the study finds that the established patterns of professional power and control further hinder multi-sectorial engagement.

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1

Introduction

There has been a great deal of discussion in academic literature on how networks can bring about improvement in health practice and policy documents have advocated their use. However, the models of how networks should operate have tended to be top-down in the sense of prescribing particular ways to proceed rather than being guided by studies on how networks actually function. In the area of healthcare in general, and public health in particular, this is a comparatively under-researched area. This thesis sets out to address this gap by investigating the degree to which the expectations concerning how a major Scottish health network should operate have been realised and by establishing what model best captures how this network actually functions.

1.1 Background to Public health

The role of public health is to control factors that are harmful to health (Dawson and Morris, 2009). This requires joint efforts of a variety of practitioners that go beyond those involved in health services. In the past public health was seen as the collation of scientific facts and their interpretation and utilization in the improvement of a population's health. It called upon a population perspective that attempts to secure the greatest health improvement for the largest number of people, particularly by addressing the needs of those individuals and groups who experience the worst health. In recent times the term public health has become interchangeable with health improvement and thus encompasses a range of social reforms or initiatives that would facilitate the achievement of this aim. The *Review of the Public Health Function in Scotland* (Scottish Executive, 2000a) emphasised the role and responsibilities of the government and local authorities in public health. It suggested that organisations and those involved in the delivery of public health have the duty to secure and sustain public health, addressing health policy issues at a population level and leading a co-ordinated effort to tackle underlying causes of poor health and disease.

The Welcome Trust (2004) provided a practical definition of public health:

> Traditionally, the basic sciences of public health have been considered to be epidemiology and biostatistics but increasingly, there is awareness that multi-disciplinary perspectives are needed in order to understand a range of influences on behaviour and to develop effective strategies to improve health. This requires contributions from the biological, physical and social sciences, including disciplines such as economics, sociology, anthropology, demography, nutrition, psychology and policy analysis.

It is clear that public health is not merely about prevention and control of disease, but requires a focus on broader determinants of health and a need to improve the health of an entire population. Beaglehole et al., (2004) suggest public health as:

> Collective action for sustained population-wide health, with a clear focus on actions and interventions that need collective (or collaborative or organised) actions; sustainability (ie, the need to embed policies within supportive systems); and the goals of public health (population-wide health improvement and the reduction of health inequalities).

Public health constitutes a significant proportion of Medical education. For example, at Edinburgh University the public health curriculum is about 12% of MBChB (www.chs.med.ed.ac.uk/education/MBChB.php). Epidemiology and biostatistics continue to constitute the key components of public health education in medicine. However, there is now recognition that public health requires input from a wide range of disciplines. Hence there are a range of professionals who would be classified as public health professionals.

1.2 Health policies and networks

Partnership working in the area of health in general and public health in particular has received considerable emphasis in the past decade or so. There have been several policy documents that have laid importance on: developing multisectoral strategies; joint decision making (WHO, 1998); involving social services and private providers (DOH, 2000); developing cross departmental approaches to health (Scottish Office, 1999); working together with local authorities and developing social inclusion partnerships (Scottish Executive, 2000); developing groups representing professionals from local authorities; voluntary sector those within the health sector (Scottish Executive, 2003a);

development of community health partnerships (Scottish Executive, 2005a,b); developing collaborative, integrated and partnership approaches (Scottish Executive, 2007); and implementing new interagency training to reduce silo mentalities (Scottish Government, 2011). In the pre-devolution period the political debate was more around the way health policy could be implemented, rather than on the fundamentals, as policy and legislation were agreed at UK level (Paterson, 1994). While there was some stress on building partnerships prior to devolution the major emphasis came about after health became a devolved agenda under the Scottish Executive. The partnerships not only included multiple sectors but also the public. In fact a survey conducted by the Scottish Executive (2000) led to the development of a plan on the *Patient Focus Public Involvement Framework* (Scottish Executive, 2001) which aimed to deliver, "a service designed for and involving users".

Scotland is seen to have a fortunate position of having good partnership working processes due to its small size (Smith, et al., 2008). The organisation of public health is distinct from that of England, Northern Ireland or Wales. In Scotland the overall responsibility for delivering public health outcomes lies in the hands of the Directors of Public Health within 14 unified health boards who have strategic and operational responsibilities. Directors of Public Health and their departments are responsible for health protection, health improvement and public health input to service planning and service quality. Greer (2009) suggests that Scotland has a unique position on public health, with its long standing serious policy connection where professionals are well integrated in policy making and hold credibility due to their closeness to power, i.e. the state.

Figure 1.1 shows the key groups involved with policies related to partnership working in health. A wide range of networks has been set up in Scotland in the health services sector, some of which are discussed later in Chapter 3. It is, however, important at this stage to briefly touch upon a specific kind of network called managed clinical networks (MCNs) set up to encourage better coordination and communication between the various disciplines typically involved in caring for a patient group with a specific health condition. MCNs are seen as unconstrained by professional and NHS board boundaries (Guthrie et al., 2010). It has been suggested that networks not only lead to better coordination and integration of service delivery for seamless care tailored to a patient's need as in managed clinical networks (Guthrie et al., 2010), but also provide for knowledge sharing and transfer (Reagans and McEvily, 2003) and promote interagency collaboration and partnership working (Lewis, 2005; Currie, 2007).

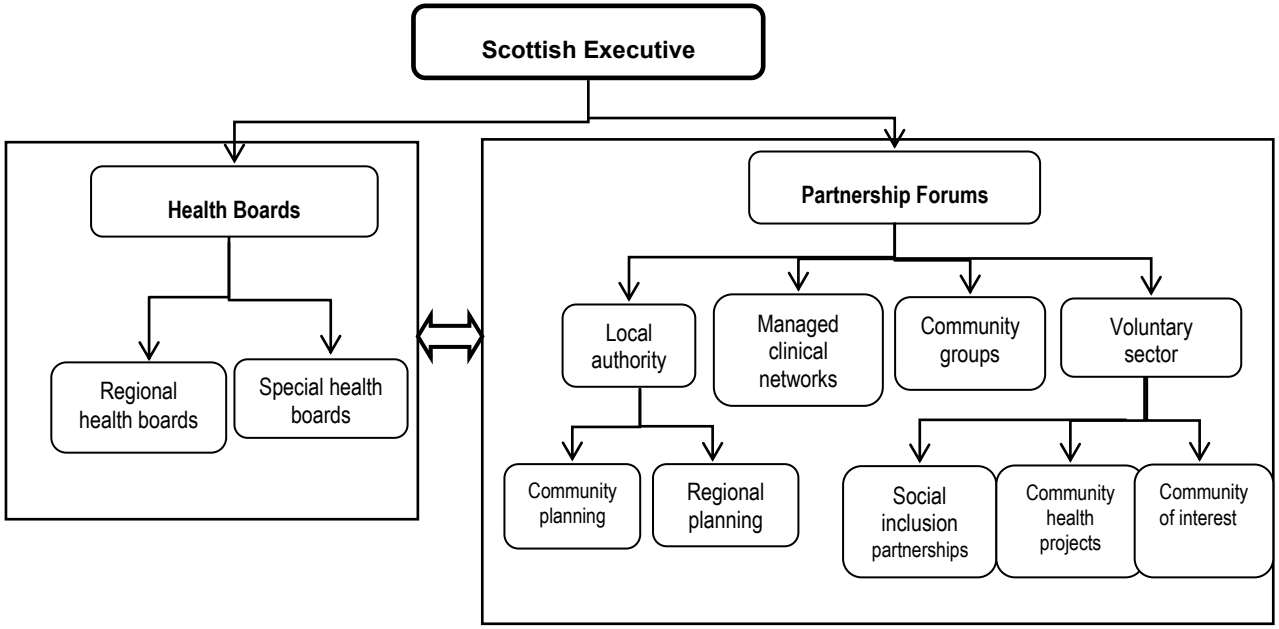

Figure 1.1: Key groups involved with policies advocating partnership

As mentioned above most managed networks in Scotland are clinical (i.e. dealing with a specific health condition). The Scottish Public Health Network (ScotPHN), which is the location of this study, is unique, in the sense that it was meant to have a structure and function similar to managed clinical networks, but was created to deal with a wide range of public health issues. Its purpose is primarily to undertake "prioritised national pieces of work" (i.e. conduct healthcare needs assessments), where there is clearly identified need, taking advantage of the skills, knowledge and expertise across Scotland for addressing public health issues at a national level (http://scotphn.net/). The functional aim of the network is to coordinate the wider public health agenda and also to oversee the rolling out of the national policy in the long term. The expectations were that the public health community across Scotland would collaborate on issues of common concern, pool collective capacity and skills, and take advantage of emerging health improvement opportunities. This study is concerned with the activities and processes of ScotPHN.

1.3 Position of the researcher

As a starting point, I would like to locate my position and experiences as they have shaped this thesis both in terms of topic and approach. I was interested in the network arrangements that deal with 'policy problems'. I have worked within the voluntary sector and in the Scottish Government which helped me gain an understanding of the two different "worlds" of policy implementation and its development. As Learning and Development Adviser within NHS I had been involved in setting up and managing a range of networks to progress national learning and development initiatives for healthcare professionals as well as managing

a professional network. In this context networks were seen to be acceptable ways of organising partnership working. A variety of network structures were being developed for a range of purposes such as providing professional support to health improvement practitioners; sharing of resources, knowledge and experience to support implementation of health improvement policy; and the professional development of the public health workforce from different sectors. However, unlike ScotPHN most of these networks were at the local or regional levels. My experience of managing these networks sensitised me to the disparities in the policy rhetoric of "partnership and stakeholder approaches" and the reality of how these approaches were functioning within the networks. I became aware of the importance of issues such as influence, power, professional expertise and position. I realised that these factors would impact on who would set the agenda and how rules for quality control and governance were set up for control of what is taken forward and what is left out. I became increasingly interested in understanding how the networks facilitate the production of new knowledge.

My understanding of networks was that they were meant to be non-hierarchical structures and that they promoted opportunities for 'joined up solutions to joined up problems' with an emphasis on interagency working. The networks would bring together people from various backgrounds and experiences of providing services and help find solutions to shared problems. When working in the voluntary sector I attended network meetings as their representative. I saw the power differential between the members representing different organisations where use of language and expert knowledge influenced what was discussed and what was taken forward. At the

same time there were individual lobbyists who were keen to make their voices heard. When working with the Scottish Executive I was involved in research and evidence that informed policy development which was also facilitated through the network structures.

1.4 Aim of the study

The public health sector is one which has multiple layers of interactions amongst different sectors and agencies. Public health informed by knowledge is therefore a complex area for research and practice. It is now recognised that a collaborative approach to gathering and applying knowledge is crucial to implementing effective multisectoral public health interventions for improved population outcomes (Armstrong et al., 2006). As discussed earlier there have been several policy initiatives to enhance collaboration amongst different sectors through the establishment of health networks. I was interested in finding out how knowledge mobilisation, essential for policy making and implementation of public health, takes place in these networks. As I started reviewing the literature it became apparent that there is little research connecting the nature of the networks and the manner in which they function to their knowledge mobilising ability. Constituted in 2006, the Scottish Public Health Network (ScotPHN), which is the primary vehicle in Scotland for mobilising public health knowledge and informing policy and practice, was selected as a location for this study to investigate knowledge mobilisation and how networks function in public health.

As a result a number of research questions arise that form the research objectives of this study:

a) What were the expectations for ScotPHN?
b) What is the nature of governance within this network?
c) How does the functioning of this network influence the interactions required for knowledge mobilisation?
d) What is the nature of knowledge being mobilised within the network?

1.5 Thesis structure

The structure of the remainder of the thesis is as follows:
Chapter 2 reviews the literature on the public health discipline and profession. It also considers research on mobilisation of knowledge particularly in a trans-disciplinary setting. In addition, the chapter also reviews literature on networks, their organisation and typology.

In Chapter 3 networks used for the delivery of health in general and public health in particular in Scotland are considered to illustrate how they are being employed to address a diverse range of public health issues. The structure and the envisaged functioning of the Scottish Public Health Network (ScotPHN) are presented.

Chapter 4 discusses the methodology employed for conducting this study. It specifies the position of the researcher and her reasons for choosing the grounded theory approach for analysis. The manner in which data were collected and analysed is discussed in detail.

Chapter 5 considers the findings arising from the analysis of data. The themes emerging from the consultation feedback obtained prior to the formation of ScotPHN and those emerging from interviews with ScotPHN members and observation of ScotPHN steering group meetings are presented separately. This was to allow a clear comparison to be made between the expectations and the reality of the network after its formation.

Chapter 6 discusses the findings in the light of existing research and policies on public health, networks and knowledge mobilisation. A model to understand how the network operates and consequently mobilises knowledge is developed.

Chapter 7 summarises the understanding generated from this study in the context of the research questions. It discusses the wider application of the findings of this study and makes recommendations on how knowledge mobilisation can be enhanced for the effective delivery of public health. It points out possible limitations of the study and makes recommendations for future studies in this area.

2

Public health, networks and knowledge

2.1 Introduction

While physicians treat diseases when they occur, public health practitioners are concerned with the prevention of illness and health improvement. Thus public health is concerned with the health of populations rather than individuals. Public Health operates by creating an evidence based understanding of the health of populations and undertakes social interventions on a community-based level. Traditionally public health evidence or

knowledge has relied on epidemiology and biostatistics. These include the effect of social and environmental factors on health, planning and evaluation of health services.

Over the years public health has progressed to include social issues such as inequality, poverty and education as there is a strong recognition that socio-economic status is an important determinant of health. Effective practice of public health now requires considerable multidisciplinary input, although since its inception public health leaders have invariably been medically trained doctors in the UK. The recognition that public health requires knowledge from multiple disciplines has led to the creation of a range of networks with the purpose of sharing and generating new knowledge which could lead to new public health policies and inform implementation.

Knowledge creation and mobilisation in the context of a public health network setting can in simple terms be seen as an array of ways in which stronger connections can be made between research, policy and practice to inform decision making. This chapter discusses three distinct fields of study: public health; knowledge mobilisation; and networks.

2.2 The public health discipline

Winslow (1920) described public health as "the science and art of preventing disease, prolonging life and promoting health through organised efforts and informed choices of society". Public health practice as we see it today is different from when it was initiated in the nineteenth century. Edwin Chadwick conducted a survey of the sanitary conditions of the labouring population of Great Britain and recommended health boards should provide drainage, cleansing and public regulation of buildings (Chadwick,

1965). The sanitary idea was based on the premise that disease is caused by miasma and unhygienic living conditions which could be prevented through appropriate drainage and provision of clean water. It has been noted that Chadwick's sanitary code was independent of medical analysis (Berridge, 2007). Chadwick was a barrister and had no medical qualifications. After Chadwick left he was succeeded by a doctor, John Simon as the medical officer of health. Both Chadwick and Simon believed that district health officers were indispensable to an effective system of disease prevention (Porter, 1991). Lewis (1986, 1991a, b) has conducted, perhaps the most comprehensive studies on the policy of public health in the late nineteenth and most of the twentieth centuries. She identifies several phases in the development of the field in which environmental sanitation was followed by emphasis on isolation and disinfection and then by education and personal hygiene. As Lewis (1991a) points out, public health has assumed a number of different guises: first preventive medicine; then social medicine; followed by community medicine and then back to public health medicine in the nineteen eighties. Thus, public health as a discipline embeds ideas that are competing and developing with shifts in population needs and professionals' responses to them. Peterson and Lupton (2000:6) differentiate traditional medicine and public health by stating that the former focuses on the health of the individual while the latter on that of the collective.

In the past few decades it has been recognised that the effective practice of public health requires a multidisciplinary input (Berridge, 2007; McPherson and Fox, 1997; Evans, 2003). It not only involves clinical areas such as epidemiology, immunisation, diagnostic screening but also includes disciplines such as community development, education, health promotion and housing (Griffiths and Hunter, 1999). The knowledge

and expertise of the vast range of professional experts, bureaucrats, and citizens involved in informing public health actions makes it a challenging field.

Public health is a complex discipline. Dawson and Morris (2009:1) present the essence of public health by saying:

> Public health is the foundation of a healthy society. To understand and improve public health requires that one do more than aggregate what one understands about individual health. …… For public health, however, one needs to do more that quantify the sum, or the mean, of the health of all the individuals within a society or population and consider the context in which individuals and societies live, for example, the role of the state as regulator, provider of social and physical infrastructure, and educator. (Dawson and Morris, 2009:1)

The involvement of multiple disciplines and sectors in the expansive agenda of public health makes decision making challenging and difficult. Petersen and Lupton (2000:6) state that everyone is, to some extent, caught up within what has become an expanding web of power and knowledge around the problematic of public health.

Brownson et al. (2011:3) also highlight the complexity and uncertainty of decision making in public health sometimes referred to as being driven by crises, hot issues, and concerns of organised interest groups. These complex public health problems that are underlined by uncertainties i.e. they are 'wicked societal problems' (Kopenjan and Klijn, 2006:6) are often unclear in content, causes, effects and solutions. The evidence based approaches in public health are well known as requiring an integration of science based interventions with community preferences, including values, resources and contexts. Finding solutions requires engagement of many actors who may have their own interests at stake. Solutions, therefore, need to be negotiated through mutual adjustment and cooperation.

2.3 The public health profession

As discussed earlier public health practice was initiated in the nineteenth century in what is often referred to as the sanitary phase. Edwin Chadwick and John Simon were the pioneers in this area (Porter, 1991). The nineteenth century pioneers of public health such as Chadwick and Simon have been characterised as distinguished, charismatic, statesmanlike and philanthropist battling for pure food and water and for sewerage systems for the prevention of diseases. While these were individual champions, they did not constitute a professional group. Porter (1991) conducted a historical study of the public health practitioners called 'the medical officers of health' for the period 1848 to 1914 and discussed the origins leading to the establishment of professional identity. Porter points out that in this early period licensing to obtain legitimacy as a medical officer of health was acquired through organised training that included clinical and preventative medical education. For example, in the 1870s and 80s candidates could obtain a diploma in public health (DPH) from the University of London only after completing medical licensing examinations. The Society of Medical Officers of Health came into being in 1889. Porter (1991) further specifies that from their initial appointment under the 1848 Public Health Act all medical officers of health in the late nineteenth century and the early twentieth century were medical practitioners even though the Act itself was ambiguous about qualifications. In this period the public health practitioners were both better qualified and enjoyed a higher pay than the general practitioners of health. In the twentieth century, public health remained a pre-eminent profession with senior public health posts restricted to medically trained doctors.

Lewis (1991a, b, 1986) follows the period examined by Porter and traces the history of the development of public health in the 20th century. Lewis notes that the memorandum on the practice of preventive medicine, issued in 1919 by the chief medical officer to the Local Government Board argued for an integration of preventive and curative medicine. It was emphasised that prevention of disease had become less a matter of removing external environmental nuisances and more a personal concern which brought the practice of public health very close to that of the general practitioner. These developments made it difficult to distinguish the practice of public health from the work of other medical practitioners. In the period 1920-50 the public health practitioners sustained their claim that their work was mainly clinical medicine but clinical medicine of a special kind. The division of labour between the Medical Officers of Health (public health practitioners) and general practitioners centred around health education and medical advice. In this period, Lewis points out, that there was considerable antagonism between public health doctors and general practitioners. In 1929 public health practitioners were given the responsibility of administering poor law hospitals. This clearly created a position of strength as the public health practitioners were now not only leading the way in preventive medicine but also educating general practitioners to play their part properly.

In the latter half of the twentieth century, writers such as Lewis (1991a, b, 1986) state that the status of public health professionals started declining and the professionals in this area started being regarded as poor cousins of the clinical practitioners. This decline in status was caused by changing needs, requirements and events during this period. Firstly, the Medical Officers of Health had become excessively involved in administrative responsibilities for the former poor law hospitals. This administrative

work meant that they were much less involved with their principal task of prevention. The public health practitioners also failed to support social medicine which was clearly a new direction for public health in the twentieth century. Social medicine provided an opportunity for challenging the nature of medical education and creating a synthesis between social science and medicine. With the introduction of vaccination in the earlier part of twentieth century, the elimination of several infectious diseases such as small pox and the scarcity of epidemics, public health was now more focussed on health improvement and health campaigning. Although public health departments were led by medically qualified professionals they were becoming strongly dependent on multidisciplinary input from other fields such as, engineering, dentistry, statistics, nursing and social work. The need for external support from other occupations meant that public health practitioners were unable to command autonomy and dominance of practice. This impacted on their claims to specialist knowledge and skills and hence diluted autonomy and power. Their specialist input was not demonstrably evident to the populations even prior to this, but this period resulted in their losing the support of the political and social elite. Thus the latter part of the twentieth century saw the growth of uncertainties in the profession of public health.

By the end of the twentieth century it became apparent that the effective practice of public health was becoming increasingly based on multidisciplinary activities (Berridge, 2007; McPherson and Fox, 1997; Evans, 2003). It included disciplines such as community development, education, health promotion and housing (Griffiths and Hunter, 1999).

This widening of focus has weakened the public health speciality (Lewis, 1991a). In 1997 the new Labour government decided to take public health "out of the ghetto" and to develop multidisciplinary public health (Evans, 2003). A White Paper explicitly emphasised the development of a multidisciplinary public health workforce, as did the review of public health functions in Scotland (Scottish Office, 1999).

In March 2000 the English Secretary of State, Allan Millburn stated:

> For too long the overarching label 'public health' has served to bundle together functions and occupations in a way that actually marginalises them from the NHS and other health partners. Let me explain what I mean. 'Public health' understood as the epidemiological analysis of the patterns and causes of population health and ill-health gets confused with 'public health' understood as population-level health promotion, which in turn gets confused with 'public health' understood as public health professionals trained in medicine. So by a series of definitional sleights of hand the argument runs that the health of the population should be mainly improved by population-level health promotion and prevention, which in turn is best delivered - or at least overseen and managed - by medical consultants in public health. The time has come to abandon this lazy thinking and occupational protectionism (Millburn, 2000).

The Faculty of Public Health Medicine (FPHM) since its inception in 1972 awarded registration and membership to medically qualified candidates who were successful in their Part I and Part II examinations. Due to the efforts of the pressure group Multidisciplinary Public Health Forum and the government, the faculty decided to open Part I of its professional examinations to non-medical candidates in 1998 and to open Part II and full membership in 2001 (www.fph.org.uk). In 2003 the Faculty of Public Health Medicine changed its name to Faculty of Public Health (www.fph.org.uk). A number of other initiatives were undertaken simultaneously. In 1998, a tripartite group comprising of the Faculty of Public Health Medicine (now Faculty of Public Health), Multidisciplinary Public Health Forum and Royal Institute of Public Health made an agreement to work together towards a system of multidisciplinary accreditation for

public health professionals. This led to the establishment of the UK Voluntary Register for Public Health Specialists (UKVRPHS) and in 2003 the departments of health for all four UK countries undertook to support the development of this Register (www.publichealthregister.org.uk). The register provides professional regulation to specialists in public health from a variety of backgrounds and is particularly meant for those public health specialists who have no other regulatory body. The registrants can come through a number of routes and from a variety of backgrounds. In other words the specialist public health jobs were no longer restricted to those with a medical background.

The above changes were accompanied by considerable debate. For example McPherson (2000) suggested that this change offered for the first time "possibilities of careers in public health without glass ceilings". The argument was that public health is very different from clinical medicine and the study of illnesses of individuals is perhaps not the best initial training. There was support from some quarters for this perspective. For example Bakshi (2000) suggested that although change is painful and that the British Medical Association has a duty to protect its members, it should not do so from a narrow perspective. "We should seize this opportunity with both hands' he suggested, and added that 'the tools that the director of public health needs in order to manage the health of the population are, in principle, not different from those required by a director of social services, a senior civil servant, or a chief executive of a public body". Others accused McPherson of trivialising medical training (Taylor and Saunders, 2000) and insisted that doctors should lead public health departments. These debates show that this change in policy was not free from wrangling about professional status.

It is now accepted that the expansive and diverse nature of public health requires multidisciplinary input for the creation of knowledge. Relevant literature associated with knowledge mobilisation is discussed in the following section.

2.4 Knowledge mobilisation

Knowledge is undoubtedly a principal currency of the new world order making it important to understand how it is created or mobilised. Devenport and Prusak (2000) define knowledge by using terms such as: "state of knowing", "being familiar with", "to recognise or apprehend facts", and methods and techniques.

> Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organisations, it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practices, and norms. (Davenport and Prusak, 2000:5)

There are a number of terms associated with knowledge mobilisation/ dissemination that have been used with subtle distinctions: knowledge transfer (KT), knowledge translation (also KT), knowledge exchange (KE), knowledge transfer and exchange (KTE), knowledge translation and transfer (KTT), knowledge mobilisation (KM), and knowledge integration (KI) (Hessels and van Lente, 2008; Cooper and Levin, 2010; Spencer, and Taylor, 2010). This study focuses on knowledge mobilisation. Here knowledge is considered as the capacity to inform decision making to take action, specifically in finding solutions for 'wicked' public health problems (Cooper and Levin, 2010). In this case mobilisation takes place through thinking, learning and interacting which is in line with social constructivism which views knowledge, experience, realities

and human understandings as being socially constructed through interaction among people (Lincoln and Guba, 2000). In knowledge mobilisation the collective and interactive process goes beyond discussions of research findings and potential applications between the researcher and the user, as in the case of knowledge transfer (Kothari et al., 2011). Here individuals adopt, construct, transform an idea to find a solution to a problem within a particular context of practice (Freeman, 2007; Nowotny et al., 2002).

The process of such transformation from data to information and information to knowledge has been characterised by Prusak and Davenport (2000:6). The four Cs involved in this are, a) comparison: of information about a particular situation with a situation that the person has known; b) consequences: assessing the implications of the information on decisions and actions; c) connections: relating the specific knowledge to others; d) conversation: checking out with others what they think about that information.

In order to access the knowledge held by individuals it is important for that knowledge to be shared. Sharing of knowledge is the basis of collaboration. Collaboration brings with itself benefits such as the sharing of skills and experiences, areas of expertise and most importantly the building of trust and rapport. Havens and Haas (2000-2001) suggest that for an organisation to support active collaboration it has to put together resources necessary to achieve desired outcomes. Public policy highlights the use of networks to facilitate a process for effective collaboration of individuals to share knowledge and create new knowledge.

In the public health context networks are sometimes seen as communities of practice, a term recently coined and popularised by Wenger (1998, 2007) to denote groups of people who share a concern or a passion for something they do and learn how to do it better through regular interaction. Wenger (1998:72-85) has described these communities as having mutual engagement, being involved in a joint enterprise, having a shared repertoire and negotiating meaning in practice. Mutual engagement is when the members of a community participate, establish norms and build collaborative relationships which serve as ties that bind these members together as a social entity. Being involved in a joint enterprise requires interactions between the members and creating shared understanding of the common bonds between them. The common understanding of their joint enterprise is negotiated by its members and is referred to as the 'domain' of the community. The development of a 'shared repertoire' is that part of the practice that includes communal resources that can be used to achieve a joint enterprise.

In fact three national dissemination networks (viz. Sexual Health and Wellbeing Learning network; Heart Health Learning Network; Early Years Learning network) in Scotland were set up as communities of practice. Communities of practice play a critical role in creating, sharing and applying organisational knowledge. They draw from the social resources within the community which include familiarity, trust, and a degree of shared language and common context among individuals (Wenger, 1998, 2007). Wenger (1998) suggests that the fostering of social capital is an essential condition for knowledge creation, sharing and use and that these communities are characterised by commonality of tasks, contexts and work interests and are not constrained by geography, or functional boundaries. The main concern of communities of practice is

practice, i.e. knowledge in action and the way they perform their jobs rather than what is expected of them within formal policies and procedures. This in a sense is a dynamic process which enables the individuals to interact with others and learn from others performing similar tasks. Wenger (1998) suggests the social nature of practice and as already stated, the membership of a community of practice 'is a matter of mutual engagement'. Communities of practice can be formed organically over time or actively initiated due to the need to engage with others facing similar issues and challenges within an organisation.

Knowledge, and its mobilisation, has been classified in several, and often overlapping, ways. These are discussed in the following sections.

2.4.1 Cognitive-possession and social-process perspectives

Chiva and Alegre (2005) found the cognitive-possession perspective and the social-process perspective to be the two major schools of thoughts coexisting within organisational learning and knowledge. Nonaka and Takeuchi (1995) are identified as aligned to the cognitive possession perspective which considers reality to be a fact and that it can be observed and analysed using sensory experiences. This knowledge can therefore be codified, stored and transmitted to others. The second school of thought considers learning to be a process of social construction (Fischer, 2003, 2005; Freeman, 2006) of shared meanings and beliefs, which is a result of social interactions that are necessary for individuals to interpret and give meanings to their experiences. Freeman (2006) present Helco's formulation of political learning as:

> Politics finds its sources not only in power but also in uncertainty – men collectively wondering what to do ….Governments not only 'power'… they also puzzle. Policy making is a form of collective puzzlement on society's behalf; it entails both deciding and knowing….Much political interaction has constituted a process of social learning expressed through policy. (Helco 1974:305-306; as quoted by Freeman, 2006:372).

The effects of power are seen as being productive in decision making rather than a solution to policy problems. Fischer (2003) presents a social constructionist approach to knowledge discourse where problems and solutions are produced together by members through communications and interactions. This enquiry has clearly aligned itself to the social process perspective and sees reality as constructed through discourse.

2.4.2 Explicit and tacit knowledge

The literature devoted to organisational learning, organisational knowledge and organisational management has favoured those that seek to highlight two opposing categories: one of knowledge that can be formalised and the other that cannot be formalised, or to a very limited extent. The distinction between explicit and tacit knowledge was presented by Michael Polanyi as "we know more than we can tell" (Polanyi, 1966:4). This concept was adapted by Nonaka and Takeuchi (1995) as they applied the concept in explaining knowledge creation and innovation in business. The tacit knowledge is akin to know-how and explicit knowledge is related to know what. They liken explicit knowledge to knowledge that is transferable in a formal and systematic language. Tacit knowledge on the other hand is personal and context specific and therefore hard to formalise and communicate. Polanyi saw tacit knowledge as being deeply rooted in human cognition and suggested that human beings acquire knowledge by actively creating and organising their own experiences and dealings with the world.

Tacit knowledge also includes cognitive and technical elements and mental models of the world created by individuals. Nonaka and Takeuchi (1995:60) note how "mental models, such as schemata, paradigms, perspectives, beliefs and viewpoints, help individuals to perceive and define their world".

It is important to acknowledge that in addition to explicit and tacit, knowledge has been further categorised by some researchers into declarative and procedural (Nickols, 2000). In this study in agreement with Nonaka and Takeuichi (1995:61) declarative knowledge is treated as corresponding to explicit knowledge. Further, procedural knowledge is treated as corresponding to tacit knowledge.

Nonaka and Takeuichi (1995:62-73) posit a spiral for knowledge creation where:

- Knowledge can be acquired by sharing experiences which may not require use of language. For example, apprentices work with their masters and learn craftsmanship through observation, imitation and practice. Such conversion of *tacit knowledge to tacit knowledge* is termed as *socialisation*.
- Amalgamating different bodies of explicit knowledge creates new combined explicit knowledge. This *explicit knowledge* to *explicit knowledge* conversion is called *combination.*
- Articulation of tacit knowledge leads to explicit knowledge. This tacit *knowledge to explicit knowledge* conversion is called *externalisation*.
- Explicit knowledge that is verbalised into documents or manuals can become tacit for an individual who uses this explicit knowledge. This *explicit knowledge to tacit knowledge* conversion is called *internalisation*.

Thus Nonaka's 'spiral of knowledge' presents the creation of knowledge where both tacit and explicit knowledge interchange through internalisation and externalisation. Different modes of knowledge creation would happen through different triggers such as providing opportunities for socialisation; successive rounds of meaningful dialogue, for externalisation; coordination between members and other sections of the organisation and documentation of existing knowledge for combination; and learning by doing for internalisation. These are illustrated in Table 2.1.

Table 2.1: Modes of knowledge conversion through dialogue (Adapted from Nonaka and Takeuchi, 1995:64)

	TACIT	**EXPLICIT**
TACIT	**Socialisation** (e.g. sharing experience, observing, imitating, brain storming)	**Externalisation** (e.g. writing it down, creating metaphors and analogies, modelling)
EXPLICIT	**Internalisation** (e.g. operational knowledge)	**Combination** (e.g. systemic knowledge, sorting, adding, categorising, methodology creation, best practice)

The idea of dialogue is vital to the process of converting tacit knowledge into explicit knowledge. It is also clear that tacit and explicit knowledge are complementary and non-substitutable (Delvaux, 2007; Polanyi, 1966). The two dimensions are thus interdependent and conversion of all tacit knowledge is not always possible. There is a need for tacit knowledge to make any explicit knowledge useful for use and mobilisation.

Delvaux (2007) suggests that in practice the two dimensions of knowledge are extremely interwoven. The fact is that any explicit knowledge has hidden within it a whole history and culture of conventions, thoughts and presumptions that would be difficult to decode. There is a lot which is assumed, implied and embedded that is

difficult to externalise and make explicit. On the other hand the conversion of explicit to tacit is dependent on the interpretations of the learner utilising their own points of reference and experiences.

2.4.3 The scientific and social context of knowledge

For knowledge to be usable it has to be applied to a particular situation or context. This means that a particular bit of knowledge would be contextualised and interpreted differently by different people (Fischer, 2003:51). Given the interpretive dimension of knowledge, science loses its privileged claim as superior knowledge (Fischer, 2005:44). Valuable insight is provided by Fischer (2005) into the need to interconnect and integrate science with the local knowledge of affected people and communities. These interconnections allow for dialogue on technical questions as well as on finding solutions that are appropriate for the local social contexts. Not only are the intentions and motives of the locals essential to a proper understanding of the situation, but they also typically possess empirical information about the situation unavailable to those outside the context.

> Given this interpretive dimension, science loses its privileged claim as superior knowledge. Empirical science need not fold up shop, but in a practical field like public policy, it has to establish a new relationship to the other relevant discourses that bear on policy judgements….. Rather than which discourse is better, the question of the relationship among multiple discourses emerges. Instead of questioning the citizen's ability to participate, we must ask how can we interconnect and coordinate the different but inherently interdependent discourses of citizens and experts. (Fischer, 2005:44-45)

> The constructivist approach as opposed to the post-empiricist approaches provide us access to deeper social and cultural contexts and ways in which citizens and experts interpret the objective assessments of the expert and the subjective cultural experiences and the social dependencies inherent to them. The interaction between the lay person and the expert is not always possible

> due to the traditional neo positivist research methods that alienate such interaction (Fischer, 2005:74).

The knowledge of the social world thus is derived through negotiations between the more 'expert knowledge' and the actors in everyday life who possess important insights regarding the practical context that gives meaning to the expert discourse (Fischer, 2005:74). Kinsella (2002) on the other hand presents the argument that the distinction between expert and lay knowledge poses a practical and symbolic barrier to participatory decision making. Kinsella (2002) suggests that viewing expertise in broader terms as a public resource through dialogue is a way to reduce this barrier; both expert and lay knowledge can be shared to generate new expert knowledge. The importance of this is well recognised in the context of public health.

2.4.4 Mode 1 and Mode 2 knowledge

Creation of knowledge has also been categorised into two modes, Mode 1 and Mode 2, by Gibbons et al. (1997). Knowledge created through sound scientific practice has been termed as Mode 1 knowledge (Gibbons et. al., 1997): "it is meant to summarise in a single phrase the cognitive and social norms which must be followed in the production, legitimation and diffusion of knowledge of this kind". Mode 2 knowledge, on the other hand, is created in transdisciplinary, social and economic contexts; is heterogeneous (unlike Mode 1 knowledge which is homogeneous); is more socially accountable and reflexive; and includes a wider, more temporary set of practitioners, collaborating on a problem defined in a specific localised context. While the use of Mode 1 knowledge is well recognised in healthcare, the importance of Mode 2 knowledge is now being recognised particularly for public health issues (Ferlie and Wood, 2003); this is discussed in the following section.

Delivery of healthcare is informed by evidence both from the scientific Mode 1 model of research as well as from a socially distributed system or Mode 2 (Gibbons et al. 1997; Ferlie and Wood, 2003). In Mode 1 knowledge production occurs through an academic agenda and is based in academic disciplines. Mode 2 is based on transdisciplinarity where team work rather than individual research is the norm (Ferlie and Wood, 2003; Hessels and van Lente, 2008). Mode 2 has dispersed knowledge sites and a coupling between academics, policy makers and practitioners around problems. The problems are identified by practitioners within projects and take place within the context of application or use. The nature of this knowledge is highly contextualised and can be diffused to different contexts and applied producing another set of new knowledge. This knowledge is "embodied in people and the way they are interacting in socially organised forms" (Gibbons et al., 1997:17). The tacit knowledge within people is what drives the creation of such knowledge. The quality of such knowledge is defined through its usefulness or efficiency through its contributions to the problem identified. Innovation within such knowledge production is often the result of engagement of people with different experiences in solving the problem in hand.

Public health is transdisciplinary delivery of service with multiple organisations involved. Therefore it offers opportunities for a Mode 2 type of knowledge production which fuzzes the distinctions between the theoretical core and application as is seen in Mode 1. There is a constant flow between the theoretical and the practical and the outputs drive further search for new contextualised knowledge. The success of such knowledge is assessed by the community of practitioners who contextualise this knowledge within specific public health settings.

Transdisciplinarity also implies that public health should neither be set within a particular discipline nor be led by professional interests. It is instead based on consensus and negotiation from actors who may belong to different disciplines to solve the problem at hand. The interesting aspect of Mode 2 knowledge production is that its starting point is based on the defined intellectual frameworks of the participants, but in the process of knowledge mobilisation a new framework appears which is different from its constituent frameworks. The participants may be involved in some cases and excluded in others depending upon the nature of the problem that needs to be solved (Ferlie and Wood, 2003; Hessels and van Lente, 2008).

2.4.5 Rationalist, institutionalist and constructivist approaches

Freeman (2007) classifies learning into three key categories: rationalist, institutionalist and constructionist. The rationalist approach is essentially the traditional scientific and evidence based method of mobilising knowledge; the type of knowledge which would appear in academic and professional journals and find its way to text books. This type of knowledge is strongly aligned to evidence based practice, a movement from the 1990s aimed to inform decision making (Hammersley, 2000:133). It emerged within the areas of business and medicine and has been termed as decision analysis (Eraut, 1994, 2000). In medicine use of randomised controlled trials which have been in existence for a long time fall into the rationalist approach of knowledge mobilisation. Similarly, use of epidemiological principles employed to estimate illness and disease occurrence are also part of this approach.

The second approach termed as institutionalist relates to the manner in which knowledge attained from different sources is processed and employed by organisations. Institutions and individuals tend to learn from others like them. Freeman (2007) has suggested that this similarity could be associated with the field or the sector of work, culture or language. In the area of healthcare the institutionalist approach would suggest that those involved in delivering health would have the propensity to learn from those (organisations/ individuals) like themselves. In other words what people learn is a function of what they believe and the way they think.

In the third approach, the constructionist approach, knowledge mobilisation is a collective and interactive process strongly routed in pragmatism. Practitioners make sense of the knowledge they derive through direct contact with peers. This knowledge may not be based on strong scientific evidence but on anecdotal experience. Hamersley (2004:136) suggests that though research based knowledge might be considered high on validity, an opinion cannot be said to have zero validity. Though factual knowledge can provide generalised versions of knowledge it always needs to be interpreted in a specific setting or context. Putting knowledge into practice depends not just on words but also on how and when the action should take place. Thus the research method of evidence gathering cannot always provide answers to the questions which require professional knowledge which relies on multiple values, tacit judgement, local knowledge and skills.

The different knowledge tools, i.e. knowledge gathered by professionals from different sources, are ‘pieced together’ to form a ‘bricolage’. These pieces of knowledge are then used as assembling tools and materials to provide a solution for the problem at hand. Freeman (2007) concludes that public health knowledge mobilisation and learning is

complex and that it begins with uncertainty and sometimes ends there too as there is conflict between different kinds of knowledge.

2.5 Policy networks and public health

Mobilisation of knowledge for the development of public health policy and its implementation is being largely achieved through a wide variety of partnerships and networks (those specific to Scotland are discussed in the following chapter).

The partnership narrative of the Labour government which came to power in 1997 meant blurring of boundaries between the public and the private sectors (Fairclough, 2000). Partnership was the new mantra of the Labour party – partnership with business and partnership with individual citizens. In this climate partnerships required for delivery of public health began to thrive. Networks constitute an important form of partnership-working to attain a common goal.

The idea of the policy network has been used within policy science, organisational science and political science. An array of policy network literature exists which has been greatly influenced by scholars such as Marsh and Rhodes (1992); Jessop (2000); Dowding (1995); Kickert et al. (1999a,b); and Pierre (2000). The literature presents policy networks as entities which allow for multidimensional patterns of interaction between actors. The network concept permits a shift from vertical hierarchies that exist in organisations to horizontal ways of managing society and governance. It can be seen as describing the nature of a policy field and the institutional structures through which policy is formulated and implemented. It can also be seen to demonstrate the ways in which organisations working in partnerships can function collectively.

The “policy network” term is loosely used within organisations with little clarity on what is being implied. Sometimes the term network is not used at all; instead they are referred to as partnerships, strategic alliances, inter-organisational relationships, coalitions, cooperative arrangements or collaborative agreements (Provan et al., 2007). Rhodes (2006) uses “policy network” as a generic term that includes notions such as issue networks (Helco, 1978), iron triangles (Ripley and Franklin, 1981), policy subsystems or sub-governments (Freeman and Stevens, 1987), policy communities (Rhodes, 2006; Dowding, 1995) and epistemic communities (Haas, 1992). Rhodes (2006) defines policy networks as sets of formal institutional and informal linkages between governmental and other actors structured around shared, if endlessly negotiated beliefs and interests in public policy making and implementation.

Provan and Kenis (2007) employ a narrower definition for the term network. They define a policy network as groups of three or more legally autonomous organisations that work together to achieve not only their own goals but also a collective goal. These networks could be mandated or self-initiated by the members. A very similar definition was developed for the term partnership by Armistead et al. (2007:212) as a cross-sector, cross-organisational group, working together under some form of recognised governance, towards common goals which would be extremely difficult, if not impossible, to achieve if tackled by a single organisation. While a network generally has a well specified aim, the drivers for its formation and its nature can vary significantly. This is discussed in the following section.

2.5.1 Typology of networks and drivers for their creation

Networks have been classified in a variety of ways. Here two different classifications, those of Marsh and Rhodes (1992) and 6 et al. (2006) are considered. Both classifications suggest distinct set of drivers for the creation of networks. Marsh and Rhodes (1992:249) classify policy networks into two types: policy communities and issue networks. The characteristics of these types are shown in Table 2.2.

Table 2.2: Types of policy networks: characteristics of policy communities and issues networks (from Marsh and Rhodes (1992:251)

Dimension	Policy community	Issue network
Membership/ Number of participants	Very limited number , some groups consciously excluded	Large
Type of interest	Economic and/or professional interest dominate	Encompasses range of affected interests
Integration Frequency of interaction	Frequent, high quality, interaction of all groups on all matters related to policy issue	Contacts fluctuate in frequency and intensity
Continuity	Membership, values, and outcomes persistent over time	Access fluctuates significantly
Consensus	All participants share basic values and accept the legitimacy of the outcome	A measure of agreement exists, but conflict is ever present
Resources/ Distribution of resources (within networks)	All participants have resources; basic relationship is an exchange relationship	Some participants may have resources, but they are limited, and basic relationship is consultative
Distribution of resources (within participating organisations)	Hierarchical; leaders can deliver members	Varied and variable distribution and capacity to regulate members
Power	There is balance of power among members. Although one group may dominate, it must be a positive-sum game if the community is to persist.	Unequal powers, reflecting unequal resources and unequal access. It is a zero-sum game.

A policy community comprises a network with limited membership and members with strong professional interest; in contrast an issue network has a large membership and addresses a range of affected interests. The public health networks cover both typologies and may often not conform exactly to any one.

The classification of 6 et al. (2006) as quoted by Peck and Dickinson (2008:17) is based on seven drivers:

Resource exchange/financial. Focuses on minimising transaction cost and has a form in which resources, money or staff is exchanged.

Organisational competence and learning. Focuses on securing new competences and knowledge, to maximise benefits.

Personal. Focuses on connections between individuals and thus organisations. The structure is based on these personal connections.

Institutional. Focuses on patterns of established authority, accountability and procedures in organisations joining the network.

Ecological. Focuses on organisational interests informing clusters to exploit specific resources in particular niches.

Problem/technology contingency. Focuses on solving particular problems and its form is shaped by the nature of the problem and potential solution.

Macro-economic/technological determinist. Focus on consequences of technology available to solve problems.

The above typologies and drivers may overlap for specific networks. The espoused reasons for pursuing partnerships, such as those in public consultation documents, may not tell the whole story of the drivers in play and prevailing political or organisational fashion may be a significant factor in the forms that the local partnerships take (Peck and Dickinson, 2008:17). The above typologies also suggest that the influence of

different individual or collective approaches to management, leadership and organisations may vary significantly between various forms of networks.

2.5.2 Network organisation

Policy networks can also be classified in the manner they organise themselves. A range of different organisational forms have been suggested by different investigators. Many of the suggested forms overlap but have been identified with variant names by different authors. Organisational forms originating from 6 et al. (2006), Provan and Kenis (2007) and Dowding (2001) are amalgamated into a single diagram and shown in Figure 2.1. Figure 2.1(a) shows a highly hierarchical structure in which information flows form A to B and from B to C and so on; it flows one way only. A enjoys the position of power. This is a highly hierarchical structure which is common in organisations, but less so in a multi-organisation setting. The second hierarchical form is show in Figure 2.1(b). Once again A is central and all command still flows from A, but those surrounding A can speak directly to him/her. The addition of an outer layer makes it a multilayered hierarchy. Actors surrounding A may sometimes have a few strong/weak ties amongst them.

Figure 2.1(c) is another hierarchical organisation where A is clearly central. Provan and Kenis (2007) call this a Lead Organistion (LO) network if A is the lead organisation or a Network Administrative Organisation (NAO) network if A administers the network. In LO there may be a single powerful buyer/ funder and a number of weaker suppliers. The network members may interact with one another though the lead organisation holds the central position. NAO comprises of a separate administrative entity which has been set up to coordinate and manage network activities. These networks could be formed as

informal structures where one individual acts as a facilitator or a broker. Alternatively in cases where there is a need for official recognition to enhance its legitimacy among both internal and external stakeholders, the structure could be more complex with entities such as a director, coordinator and the board. The government run NAOs are generally set up by mandate with funding being provided for network facilitation. Managers in all hierarchical networks derive their authority from their position and achieve impact by calling on the formal rules and roles of the partnership.

The network structure shown in Figure 2.1(d) is termed a Shared Governance Network (Provan and Kenis, 2007) and an enclave by 6 et al. (2006). These networks have shared participant governance and multiple organisations work collectively with no distinct governing entity. The administration and coordination of activities might be performed by a subset of the network. The manager in this form of network will get authority from commitment to the cause and achieve impact by appealing to the shared goals of the partnership. This type of network is inclusive and flexible and responsive to network participants' needs. Provan and Kenis (2007) suggest that this model is inefficient and is suited to small geographically concentrated networks where there is an opportunity for face to face participation.

The network structure shown in Figure 2.1(e) indicates strong ties to own organisation and weak ties to other organisations. A manager in an individualist network will get authority by an ability to connect disparate organisations and individuals and achieve impact by outputs and outcomes that these alignments can deliver (Peck and Dickinson, 2008:19-20). Most networks are actually hybrids and combine elements of different ways of organising.

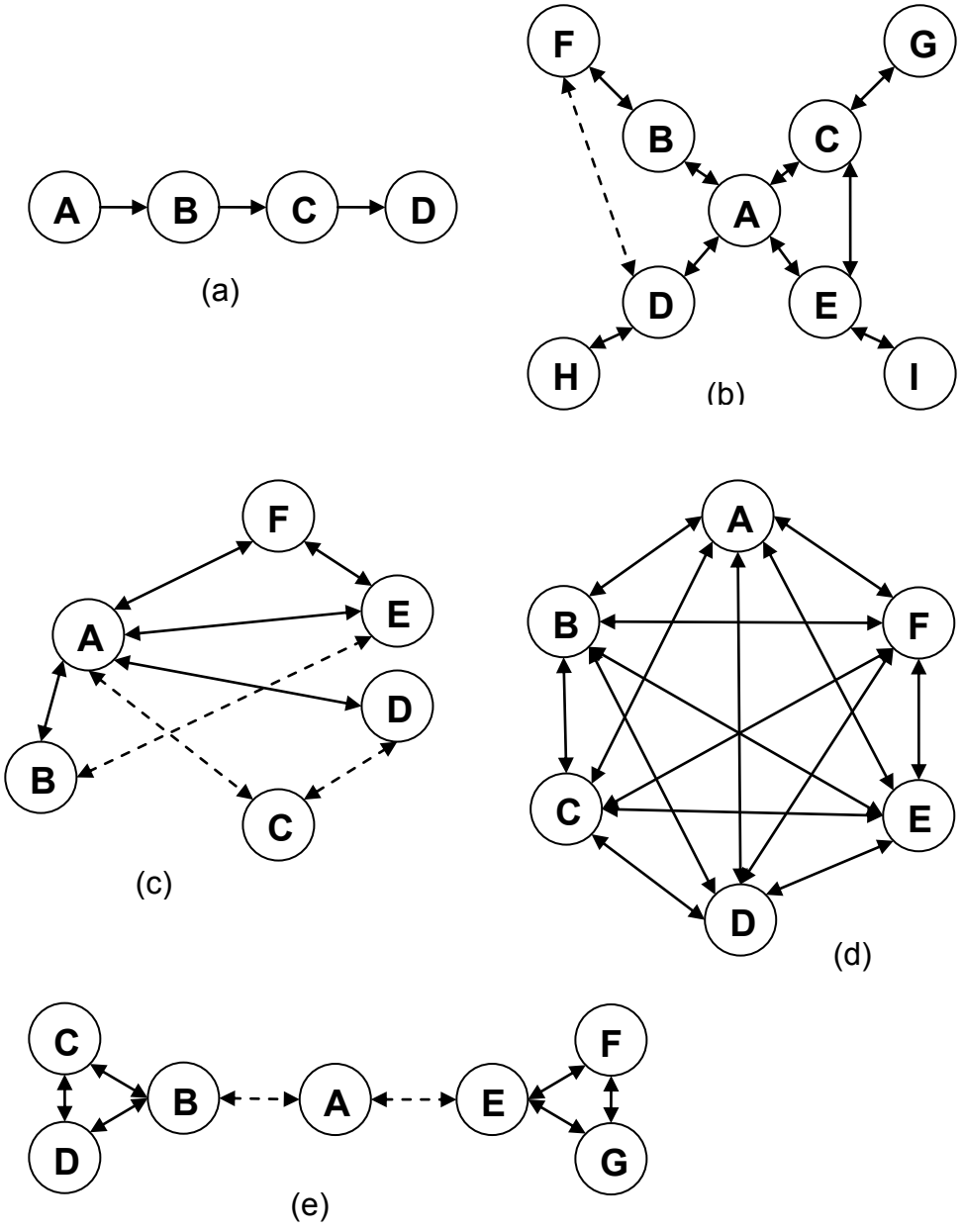

Figure 2.1: Network organisation structures suggested in the literature. (a) Hierarchical 1 (based on Dowding, 1995, 2001); (b) Hierarchical 2 (extended version of 6 et al., 2006); (c) Hierarchical 3 (also called Lead Organisation Network or Network Administrative Organisation by Provan and Kenis, 2007), the dashed lines indicate weak ties, 6 et al. use the term isolate to indicate actors with no strong ties; (d) Shared governance network (Provan and Kenis, 2007) or enclave (6 et al., 2006); (e) Individualistic (6 et al., 2006).

Apart from the organisational structure other linking factors may affect relationships amongst network members. Bruijn and Heuvelhof (1997) suggest that there are two linking factors that affect network characteristics. According to them the first is found in the actors who are part of the network: their numbers, their variety, their interests and their ability to learn. The second linking factor is found in the relationships which exist between the actors in the network. Are all actors associated with each other to the same extent or are there, in addition to highly involved actors, other actors who are relatively isolated? How permanent are the established relationships? Some of these issues are further discussed as part of network closedness in the following section.

2.5.3 Network closedness

As discussed earlier, networks are created to enhance collaboration to achieve a shared goal. Closedness inhibits these interactions. There is considerable literature on "iron triangles" and "sub-systems" which points to this (Freeman and Stevens, 1987:12-13). Schaap and van Twist (1999) discuss two forms of closedness: closedness of different actors within a network; and closedness of the networks themselves. Closedness is often a combination of deliberate as well as unintended closedness (Kopenjan and Klijn, 2004:88). The distinction between different forms of closedness has also been enunciated on the basis of social and cognitive dimension of interactions (Kopenjan and Klijn, 2004:87; Schaaap and van Twist, 1999). When actors fail to appreciate the contributions of other actors or do not consider them relevant, this is termed as closedness in the social dimension and has also been referred to as social fixation. Closedness in the social dimension may be arranged formally and informally and can

have a conscious and unconscious nature. Formal closedness for example, can be introduced through a particular academic qualification as a pre-condition to membership. Informal inclusion/exclusion can develop within a network which regulates inclusion of actors in, and their exclusion from, interaction within the network, without this being formally specified.

Closedness in the cognitive dimension refers to an ability to perceive or an unwillingness to perceive (Schaap and van Twist, 1999). The former arises when network actors are unable to perceive the reality outside. Even when it is perceived the actors may employ their own frame of reference to assign meaning to this perception. This ascription of selective meaning to reality can result in a degree of cognitive closedness. Cognitive closedness due to unwillingness to perceive stems from a conscious strategy in which the actors may declare, for example, a particular line of approach to be out of order. Forms of closedness can thus be divided into eight distinct categories (Table 2.3) based on whether they are social or cognitive; conscious or unconscious; of networks or of network actors.

Table 2.3: Forms of closedness (From Schaap and van Twist, 1999:65)

Social closedness		**Cognitive closedness**	
Unconscious exclusion by actors	Conscious exclusion by actors	Actors' inability to perceive	Actors' unwillingness to perceive
Unconscious exclusion by networks	Conscious exclusion by networks	Network's inability to perceive	Network's unwillingness to perceive

2.5.4 Influence and power in networks

Most network theories assume that the power of an actor in a network is linked to the resources he or she possesses (Klijn,1999:33). Several other sources of potential power have been considered in the literature (Peck and Dickinson, 2008:91): information expertise; credibility; stature and prestige; uncertainty; access to top level managers; control of money, sanctions and rewards; and control over resources. Koppenjan and Klijn (2004:47) distinguished between realisation power and hindrance power. Actors can block the creation of a solution when they control an irreplaceable resource or when their interests are threatened. Possession of realisation power is essential to achieve a solution; a power which may not always be concentrated within one actor. Following Lukes (1974), Peck and Dickinson (2008:91-92) describe three dimensions of power:

Direct decision making. An actor having power over another to get him to do something that the other actor would not otherwise do.

Non-decision making. An actor preventing issues that are not in his interest from surfacing.

Defining interests. An actor exercising power over B by influencing and shaping the wants of other actors, for example through framing a problem in a particular way.

Lewis (2005) suggests that the corporate elite of medicine may exercise significant control in health policy agenda setting, divorced from frontline service providers. Specifically in a healthcare setting, it is found that actors seen as influential are those who are medically trained and working in academia, health bureaucracies and public teaching hospitals.

2.5.5 Networks in public health

At the macro level of policy development the World Health Organisations policy framework (WHO,1998:4) places considerable emphasis on the participation of individuals and groups in healthcare advocating the "participation by and accountability of individuals, groups and communities and of institutions, organisations and sectors in health development". Participation has been necessitated by an increasing recognition that the state of wellbeing is not just absence of ill-health, prevention of disease or diagnosis and prescription, but a more holistic view of a state of complete physical, mental and social well-being. The WHO framework makes recommendations for European nations to take a holistic approach when planning national policies and frameworks.

> Emphasis is placed at each level on building alliances and partnerships for health, empowering people and creating networks. (WHO, 1998:201)

Abbot and Killoran (2005) examined public health networks in England. They found that they operated at four levels: a) a single Primary Care Trust (PCT) level; b) a group of PCTs level; c) throughout the strategic health authority level; and d) at the regional level where public health professionals and a broader range of experts and agencies engaged with each other. The scope of functions covered by these networks include: health information and knowledge management; health protection and communicable disease control; specialist public health advice and/or management regarding prevention programmes, national service frameworks, clinical networks; training and professional development. It is important to note that policy making was not the key function of the English public health networks considered by Abbot and Killoran (2005). While the need to share complementary resources and competences was recognised in the above study it stated that the networks were unclear as to how this was to be done.

A wide range of public health networks exist in Scotland and are discussed in detail in the following chapter.

3

Public Health Networks in Scotland

3.1 Introduction

As mentioned in Chapter 1 Scotland makes its own decisions on how to deliver health to its citizens. This chapter describes the delivery of health in Scotland and the unique status of public health. A wide variety of networks, with varying structures are being employed for the delivery of public health in Scotland. Some of these are then discussed to illustrate how they are being used to address the diverse range of public health issues. The structure and the envisaged functioning of the Scottish Public Health Network (ScotPHN), which is the location of this study, is then presented.

3.2 Public health delivery in Scotland

Scotland is a country with around 5 million inhabitants. Responsibility for administering the health system in Scotland is held by the Scottish Government following devolution in 1999. The Scottish government retains the powers to legislate on a number of devolved areas such as health, education, housing and law. The health service in the UK is provided free of cost to all through the National Health Service (NHS) at point of delivery and is funded through general taxation.

Public health is an important arm of the Health Department of the Scottish Government. Over the years public health has progressed to include issues such as inequality, poverty and education as there is a strong recognition that socio-economic status determines health status. The Health Department oversees the operation of the NHS in Scotland. Due to the left-leaning nature of the politics within Scotland led by the Labour Party and the Scottish National Party the public debate is structurally more favourable to public health arguments (Greer, 2009:25). There is commitment to the wider determinants of health and the reduction of health inequalities. The 2007 manifesto of the Scottish Labour party had a strong commitment to public health:

> Scottish Labour will take the bold decisions to improve the health of everyone in Scotland….. Health cannot be tackled in isolation. Scottish Labour will continue to champion public health across devolved government and will tackle Scotland's big challenge: obesity, poor diet, inactive lifestyles, alcohol and substance misuse, and smoking.

Similarly, the 2007 manifesto of SNP suggests:

> Health policy should be as much about preventing ill-health as treating it. The SNP will focus on improving public health, as well as ensuring good and timely medical treatment. We will pay particular attention to reducing health inequalities within Scotland – as well as between Scotland and the rest of Western Europe.

The policies emanating from the Health Department, appeared to reject a top-down approach to health service organisation, and promote models that focused on partnerships.

In Scotland the Public Health department is led by the Chief Medical Officer – Public Health and Sport (CMO-PHS). The CMO-PHS works with ministers, delivery partners and other stakeholders to protect and improve public health. The CMO-PHS also promotes sport and physical activity and provides support for the generation of evidence as well as oversees the clinical effectiveness of healthcare services in Scotland (www.scotland.gov.uk).

Health in Scotland is provided through fourteen regional health boards (e.g. NHS Lothian, NHS Greater Glasgow and Clyde) and six specialist health boards (e.g. NHS 24, NHS Education for Scotland, Scottish Ambulance Service). Each regional health board has a public health department which has statutory functions and duties such as communicable disease control and environmental health. These departments are led by directors of public health and supported by consultants in public health.

Donnelly (2007:25) categorised the public health system in Scotland in five tiers as shown in Table 3.1. Tier 1 comprises of community health partnerships (CHPs) that work with local authorities and other sub-committees (these are further discussed later in this chapter). At the other end tier 5 is the Scottish Government Health Department. The five-tier structure presented by Donnelly appears to suggest a fairly hierarchical delivery of public health. This is not so as public health policies are developed and delivered through a range of complex networks some of which are discussed later in the

following sections. It is also important to note that not all public health is delivered through CHPs as Table 3.1 suggests.

Table 3.1: Scotland's public health system. (from Donnely, 2007:25)

Tier 1	Community health partnerships between 1 to 5 per health board area. These structures work through local partnerships and have a leading role in health improvement and tackling health inequalities. These are generally coterminous with local authorities and are sub-committees of the 14 boards.
Tier 2	14 unified health boards combine strategic and operational responsibilities. The Directors of Public Health and their departments are responsible for health protection, health improvement and public health input to service planning and service quality.
Tier 3	The 14 boards are grouped into three regional networks. There are formal mutual aid arrangements between public health departments and appropriate mutual agreements between public health departments and topic specific leads.
Tier 4	National agencies have an important role and interface with both the policy centre and the territorial boards. These include Health Protection Scotland, NHS Health Scotland (an amalgamation of the former Health Education Board for Scotland and the Public Health Institute for Scotland), NHS Healthcare Improvement Scotland, which includes NHS Quality Improvement Scotland (including the Healthcare Environment Inspectorate, Scottish Intercollegiate Guidelines Network and the Scottish Health Council), and NHS Education Scotland.
Tier 5	Scottish Government Health Department public health leadership comes from the Civil Service Policy Group headed by a board level appointee and from the Chief Medical Officer discharged via deputy CMO and his/her public health professional group.

Greer (2007; 2009), points out the unique position of public health in Scotland with its long standing policy connection where professionals are well integrated in policy making and hold credibility due to their closeness to power. Greer also suggests that the Scottish policy community has a strong representation from both public health

professionals and interest groups which have led to public health actions such as bringing about the smoking ban.

It is however, important to note that deep-seated inequalities remain in the provision of health in Scotland (Audit Scotland, 2012). Age, gender and ethnicity are factors associated with inequalities but deprivation is the key determinant. The Audit Scotland report assesses the collective performance of public sector bodies in tackling health inequalities and reviews initiatives aimed at reducing them. Equally Well (Scottish Government, 2008a) together with Achieving our Potential (Scottish Government, 2008b) and the Early Years Framework (Scottish Government, 2008c) provide the current strategies for the public sector to tackle the root causes of health inequalities in Scotland.

Kerr (2005) in his consultations with Scottish citizens and frontline staff found that there was a need for greater integration of health services by breaking down organisational and professional barriers that prevent effective service delivery. Kerr also proposes a Scottish strategic model as one of collaboration and collectivism based on collective ownership and development of services as well as a high level of engagement and involvement from both the workforce and the citizens.

> At risk of seeming overly sentimental, I believe that a more truly Scottish model of healthcare would be to take a collective approach in which we generate strength from integration and transformation through unity of purpose. Patient choice is important, but the people of Scotland sent us a strong message that certainty carries greater weight….(Kerr 2005:2).

The aim of *Better Health Better Care* (Scottish Government, 2007), is to promote high levels of public consultation, engagement and creation of an integrated health system

through partnerships. The partnership suggested is a balance between rights of the users alongside greater responsibilities for managing one's own health. It emphasises the development of a mutual NHS with a common sense of purpose where organisations come together for co-production of health. The concept of co-production has been used increasingly in public service delivery in the UK. The users are considered as 'resources' that have the knowledge, skills, expertise and mutual support that can contribute to service (Scottish Government, 2007). Public health is a complex discipline that requires input from a wide range of practitioners as well as users.

Thus it can be said that the focus of Scottish policies has been towards working together to find better ways of doing things. The development of networks has been one of the key policy vehicles for doing this.

3.3 Network as a vehicle for delivery of public health

Public Health in Scotland is delivered through a range of networks that can be classified as: voluntary networks and mandated networks. The mandated networks are "created by organisations or individuals from outwith the potential network membership, often as a way to coordinate disconnected groups to achieve an externally identified aim" (Guthrie et al., 2010). Networks established through direct policy intervention clearly fall in this category. When individuals and groups get together of their own accord to form networks to address mutual problems about which they feel collaboration would be useful, then the constituted networks are termed as voluntary. The public health networks are "a way to address concerns about professional isolation, the changing structures of delivery, professional accountability and the need to coordinate a fragmented public health system" (Thorpe, 2007:339-340). NHS Health Scotland is a

special health board with a national remit for health improvement for Scotland. It is the delivery arm for the Scottish Government's public health policies and has an influencing role in most networks that deal with public health issues. The following section provides an overview of the expanse of networks within Scotland that support public health delivery.

3.3.1 Networks managed by NHS Health Scotland

The organisation works with NHS Boards and other partners to support the implementation of public health and health inequalities programmes. The overall focus of the activities is to support health boards and partner agencies to help populations to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care. The organisation supports the building of networks and partnerships to help bring people together to share learning and develop good practice.

The networks managed by Health Scotland fall in both the mandated and voluntary categories discussed above; although it is not always easy to firmly place them in one category or the other. Examples of networks that can be identified as mandated are: Heart Health Learning Network, Sexual Health and Wellbeing Learning Network, and Early Years Learning network. These came about in 2003 because of the *Partnership for Care* policy enunciated by the Scottish Government (Scottish Executive, 2003a). These networks were funded by the Scottish Government. Another example of a mandated network is the Scottish Public Health Network, which is the focus of this study and further discussed later in this chapter.

A second category of networks managed by Health Scotland are those created as part of the service delivery of this specialist health board. The decision to form these networks was made within Health Scotland as part of its remit to deliver public health and therefor these networks could be classed as voluntary. These networks are developed with a view to building partnerships, bringing people together, to share learning and to develop good practice.

A recent study conducted by me (Pankaj, 2012) with members of twelve networks within Health Scotland further found that networking was seen as the most common activity of the networks followed by sharing of good practice. Perceptions of what participants as the main activities of networks are illustrated in Figure 3.1

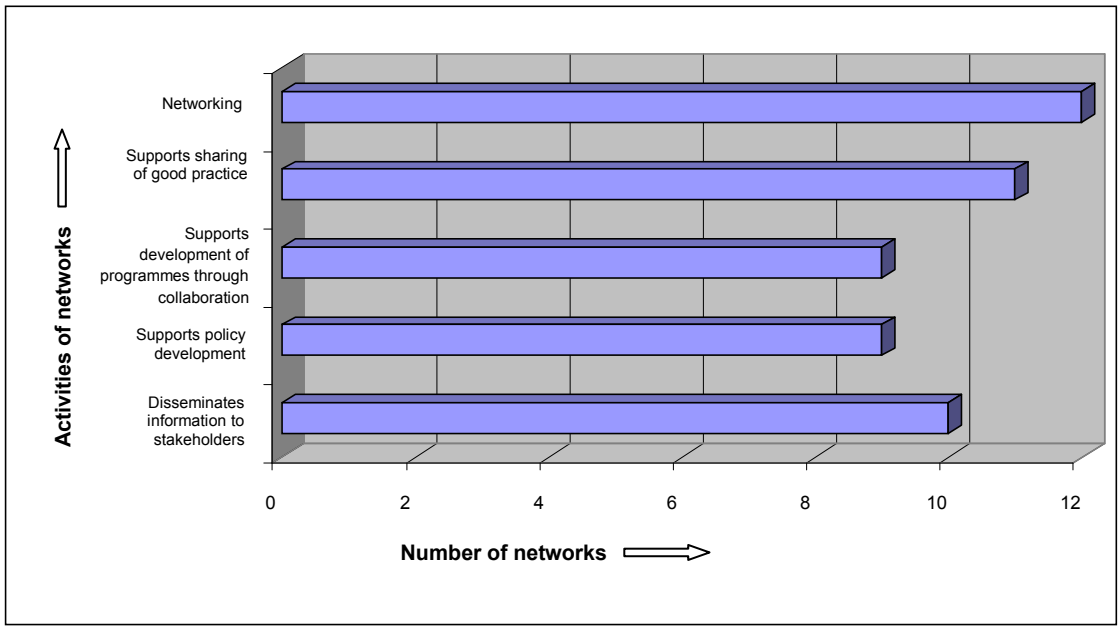

Figure 3.1: Main activities of networks within Health Scotland (Pankaj, 2012)

The study also found that there was great diversity in the networks within Health Scotland:

- Existence to absence of different levels of hierarchies within network structures.
- Varying numbers of network members – from single figures to thousands.
- Different levels of centrality of Health Scotland within networks.
- Varying density of ties – both in terms of the number of ties that exist between members and the strength between them.
- Some networks undertook focused pieces of project work often conducted by network subgroups, while other networks were primarily meant for sharing learning.
- The role of the coordinator was central to almost all networks in creating strong relationships between the individuals and supported brokering of relationships between cliques. The role of the coordinator varied across networks.

The study found that networks in Health Scotland are seen to have an overarching function of coordination, collaboration and partnership. This function could be further divided into knowledge" and practice" functions as shown in Figure 3.2.

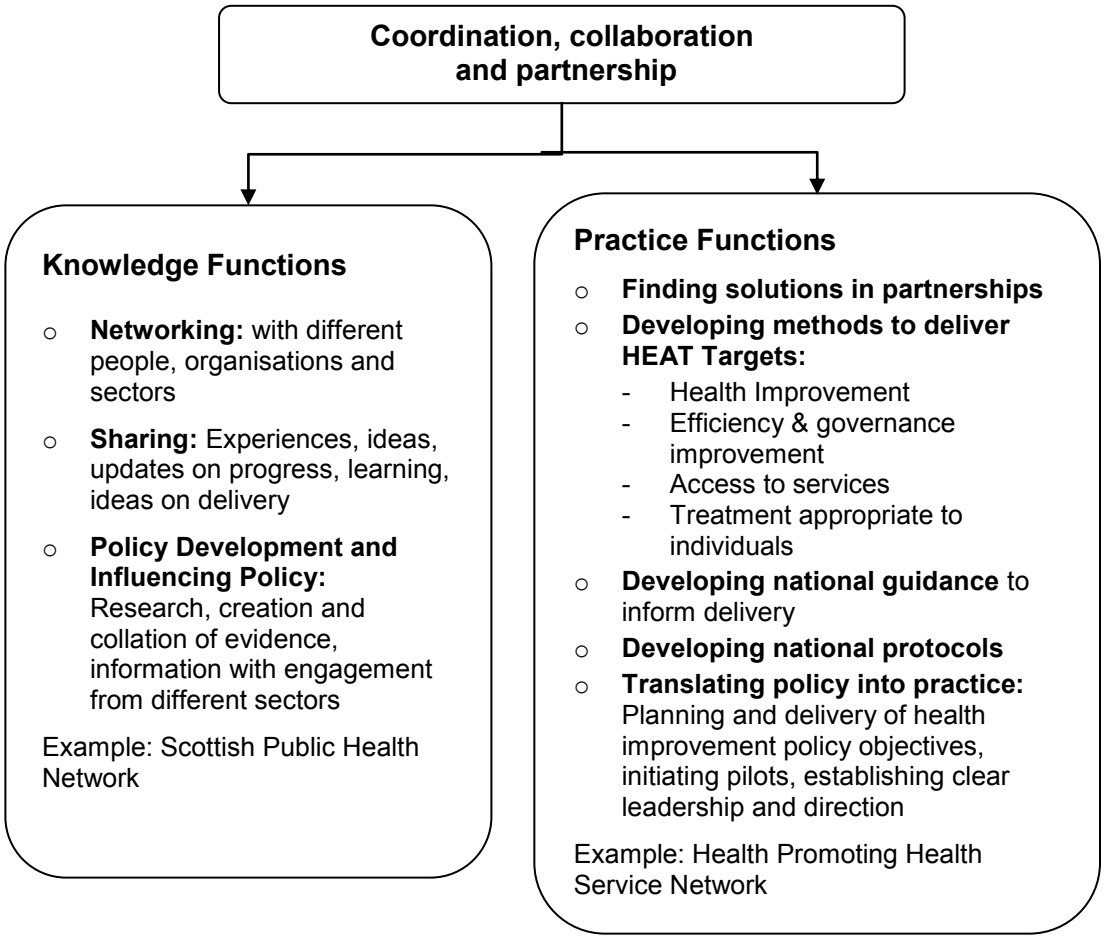

Figure 3.2: Functions of the networks managed by Health Scotland (Pankaj, 2012)

An example of a network with a practice function is the Wellbeing in Sexual Health Network (WISH). The network is coordinated by Health Scotland and has an inner core membership of senior sexual health promotion specialists; HIV leads from health boards, clinicians from different health boards and stakeholder networking groups. It influences and networks, at the ground level (outer core), with a number of other groups as shown in Figure 3.3. WISH has an outer core membership in thousands and a clear practice function to improve sexual health. With reference to network organisation discussed in Chapter 2, WISH can be classed as an issue network due to its flexible

membership (Marsh and Rhodes, 1992:251), and a Lead Organisation Network according to Provan and Kenis (2007).

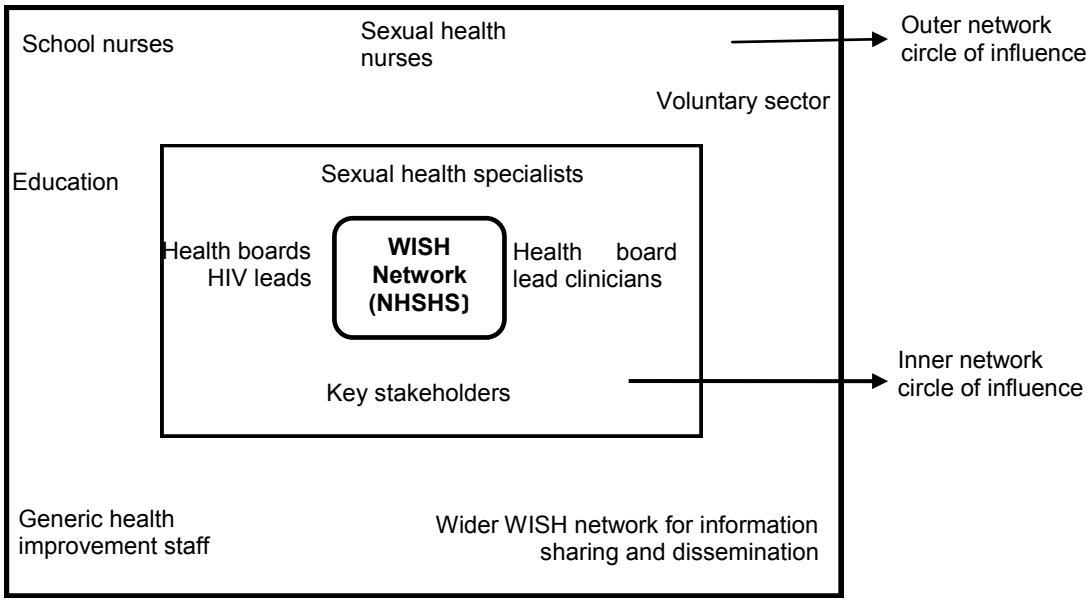

Figure 3.3: Wellbeing in Sexual Health Network (Pankaj, 2012)

The Health Promoting Health Service Network (HPHS), within Health Scotland, is a network that not only influences but also develops policy. The structure of the network is shown in Figure 3.4. This network has clear links with the Scottish Government and influences policy development and delivery. Its membership comprises of representatives from the local health boards and influences implementation of the *Health Promoting Health Service Framework* (Health Scotland, 2005) through these. It also has links with the international WHO Health Promoting Health Service Network. This network appears to fit the definition of a policy community (Marsh and Rhodes, 1992:251) discussed in Chapter 2.

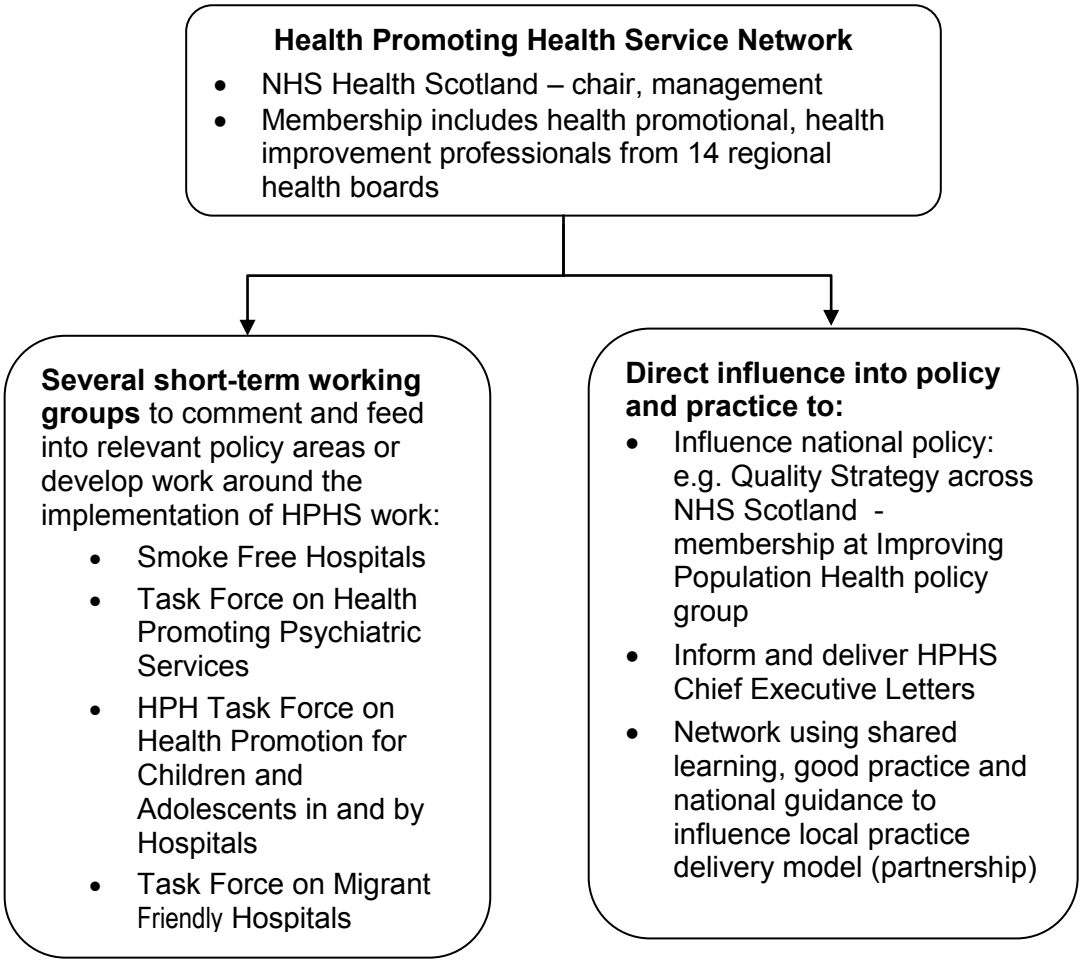

Figure 3.4: Health Promoting Health Service Network

There are also a number of network examples within Health Scotland that fall in between influencing policy and practice. Some examples are Physical Activity and Health Alliance Network, Food and Health Alliance Network and Equality and Diversity Network.

3.3.2 Community Health Partnerships (CHPs)

Partnership approaches have been becoming stronger within Scotland since devolution. The *NHS Reform (Scotland) Act* (2004) (Scottish Executive, 2004a) abolished separate primary care trusts and acute trusts and created unified NHS boards to manage the NHS

under a single system. Thirty six CHPs were created as statutory bodies within NHS health boards and exist as a subcommittee to cover the whole geographical area of the board. These are expected to provide certain community-based health services through partnerships and by bridging the gap between primary and secondary healthcare, and also between health and social care which includes public health. The CHP committees include the CHP general manager, a GP, a nurse, a medical practitioner who does not provide primary medical services, a councilor or officer of the local authority, a staff representative, a member of the public partnership forum, a community pharmacist, an allied health professional, a dentist, an optometrist and a member of the voluntary sector. A CHP committee functions through a range of local partnership networks/groups including the health and well-being thematic group, local partnership forum, community planning partnership board and the managed clinical network to name a few (Audit Scotland, 2011).

Partnership for Care (Scottish Executive, 2003a) proposed CHPs as an important structural change to bring healthcare closer to the community. The CHPs were being developed through devolving the funding power to the local level. Partnership with local authorities and decision making at a local level have been promoted as the means to make a real difference to population health. The CHPs were tasked with working in partnership to integrate and redesign NHS and other joint local services to improve the health of their communities. Priority areas of work of the CHPs include: better access to Primary Care Services; taking a systematic approach to long term conditions; anticipatory care; supporting people at home; preventing avoidable hospital admissions; more local diagnosis and treatment; enabling discharge and rehabilitation; improving

specific health outcomes and improving health and tackling inequalities (www.chp.scot.nhs.uk).

3.3.3 Managed Clinical Networks

These are one of the key vehicles to promote healthcare through partnership between the primary, secondary and tertiary sectors within Scotland. The Acute Services review (Scottish Office, 1998) identified the need for Managed Clinical Networks (MCN) as a dynamic system that promotes collaborative working between professionals to deliver high quality, more accessible and equitable services. This description of Managed Clinical Networks was enunciated in the NHS Management Executive Letter (MEL, 1999). These networks are managed and are not informal and an MCN could be for a public health issue or for clinical intervention. The principles of an MCN include (MEL, 1999):

- Each network must have clarity about network management arrangements, including the appointment of a person who is recognised as having overall responsibility for the operation of the network, whether a lead clinician, a clinical manager or otherwise.
- Each network must have a defined structure which sets out the points at which the service is to be delivered, and the connections between them.
- Each network must have a clear statement of the specific clinical and service improvements which patients could expect as a result of the establishment of the network.
- Each network must be truly multidisciplinary/ multiprofessional and should include representation from patients' organisations in its management arrangements.

- Each network must have a clear policy on the dissemination of information to patients, and the nature of that information, bearing in mind the role of primary care in helping to lead the patient through the system.

- The educational and training potential for networks should be used to the full, through exchanges between those working in the community and primary care and those working in hospitals/specialist centres. Networks' potential to contribute to the development of the intermediate specialist concept should also be kept in mind, and networks should develop appropriate affiliations to educational institutions. (MEL, 1999)

Managed clinical networks typically focus on a disease and provide innovative ways of either preventing a particular disease or organising acute services that a patient with the particular disease may need. These networks focus on diseases that require input from a wider range of practitioners across organisational boundaries. For example, the managed cancer network has been an early experiment in this form. The network has several topic specific groups such as the breast cancer, colorectal cancer and lung cancer groups. Each of these topic specific groups has representation from a range of professionals with varying expertise (e.g. surgery, oncology, nursing, pathology). Such cancer networks have been established for different regions in Scotland. In managed clinical networks the arrangements between the professionals are formalised and managed (MEL, 1999). As a result MCNs are not informal or casual but they build upon and formalise natural associations between professionals for the benefit of the patients. The management structure has defined areas of accountability and relationships between individuals and the network has clearly identified boundaries. Although MCNs are formalised networks their origins can be mandated or voluntary (Guthrie et al., 2010:66-67). In voluntary MCNs clinicians voluntarily make efforts to establish linkages with

colleagues in their area of interest. This early networking is subsequently formalised through the introduction of an MCN. Holmes and Langmaack, (2002) describe MCNs as horizontal networks in contrast to vertical hierarchical management structures that are seen to stifle creativity. They suggest that these networks can be of several types: those covering a specific disease; those associated with a specific speciality (e.g. child health); those with a specific function (e.g. home treatment) or research.

This model allows for diffusion of good and evidence based practice to wider professionals involved in service delivery. The importance of professionally led managed clinical networks in Scottish policy to some extent reflects the limits placed on markets and competition in Scotland. There is enhanced focus on working with social care. Historically, the formation of Managed Clinical Networks (MCNs) has been central to NHS Scotland policy for delivery of higher quality, more accessible and equitable services (Scottish Executive 1999, 2002, 2003, and Scottish Government, 2007).

3.4 The Scottish Public Health Network (ScotPHN)

The Scottish Public Health Network (ScotPHN), constitutes the focus of this study. ScotPHN comprises of a steering group, stakeholder group and project groups, the details of which are discussed later in this section. In this study the functioning of ScotPHN is considered in its entirety, though the project group chosen was for a single specific health condition namely HIV. This section discusses the origins of ScotPHN, its structure and the manner in which it is managed.

ScotPHN was developed in the format of a managed clinical network led by the directors of public health across NHS boards in Scotland. This network evolved from the previously existing Scottish Needs Assessment Programme (SNAP) which started in 1991 as a self-help group of public health medicine consultants to undertake the production of needs assessment, develop methodology and share their findings across Scotland. SNAP developed into a key resource in the commissioning process and produced over 60 reports on a wide range of health issues.

With the establishment of the Public Health Institute of Scotland in January 2001, the decision was made to incorporate the SNAP programme within the overall work programme of the Institute (Public Health Institute for Scotland, 2002) i.e. SNAP was hosted the Public Health Institute for Scotland (which is now part of NHS Health Scotland).

The 2003 *White Paper* (Scottish Executive, 2003a), outlined ways in which redesign, integration and quality of services could be systematically progressed. The White Paper emphasised the need for partnerships between organisations such as the local authorities and the voluntary sector.

> Health Improvement has often been seen as a task for the Director of Public Health and health promotion departments in the NHS. This is no longer acceptable. Promoting Scotland's health needs support and leadership from: Ministers and Departments across the Scottish Executive; local authorities; employers; professionals in health, education and social inclusion; local community leaders; Trade Unions and representative groups in the voluntary sector. (Partnership for Care: Scotland's Health White paper, 2003:12).

Scotland's health *White Paper* (Scottish Executive, 2003a) was accompanied by another document entitled *'Improving Health in Scotland: The Challenge'* (Scottish Executive, 2003b), which recommended changes to the strategic leadership that would ensure public health is high on the agenda for all health boards. On the recommendation of the above document a new Health Improvement Directorate was created within the Scottish Executive to work across boundaries, linking the different agendas that impact on health. This meant that the existing network (SNAP) could no longer exist as a self-help network for the directors of public health and needed to embrace public health policy. The Scottish Public Health Network (ScotPHN) was formed in 2006 as a tool to support the development of resources such as health needs assessment at a national level, collation of evidence to inform policy and practice through participation, making use of scarce resources and involvement of stakeholders at various levels of the public health community.

The aims of ScotPHN are (www.scotphn.net/about):

- To undertake prioritised national pieces of work where there is a clearly identified need
- To facilitate information exchange between public health practitioners, link with other networks and share learning
- To create effective communication amongst professionals and the public to allow efficient co-ordination of public health activity

The development and funding for the new network was approved by the Chief Medical Officer (CMO) in June 2005 following recommendations made by the Chair of the Scottish Directors of Public Health Group. A national consultation exercise was

conducted to establish the role and remit of this network. The network was to incorporate specialist public health services, specialist health promotion and health improvement services but did not include health protection as per the ScotPHN Progress update and consultation paper (NHS HS, 2005).

> Over the past few years there have been ongoing discussions regarding a proposal for a Public Health Network to provide a collaborative approach to public health in Scotland, learning from the Managed Clinical Networks in Scotland and also the Public Health Networks which have been developed in England. This discussion has taken place against a background where, following the demise of the Scottish Needs Assessment Programme (SNAP), there has not been a framework through which key public health partners from across Scotland could easily collaborate on issues of common concern, or pool collective capacity and skills to take advantage of emerging opportunities for improving public health. The only clear exceptions to this are around health protection and screening.
>
> The network will carry out important national pieces of work where there is a clearly identified need and priority, taking advantage of the skills, knowledge and expertise which are spread widely across Scotland, in addressing public health issues at a national level.

3.4.1 Management of the ScotPHN

The ScotPHN is accountable to the Scottish Directors of Public Health (SDPH). The network is hosted by NHS Health Scotland which is responsible for its corporate governance. The management of the network is through the following structure:

1. A steering group to manage governance and accountability.
2. A wider stakeholder group to facilitate communications with the wider public health workforce.
3. Project groups are made up of topic specialists and practitioners from relevant organisations to take forward specific identified pieces of work.

While the structure of ScotPHN envisaged that the steering group would have the governance and accountability responsibilities its relationships with the stakeholder and project groups was not clearly specified. The consultation paper (NHS HS, 2005)

suggests that the project groups were expected to be overseen by the stakeholder group which suggests that the link between the project group and the steering group had not been explicitly stated. The relationship between different groups of ScotPHN can be expressed as shown in Figure 3.5. The constitution of various groups is discussed in the following sections.

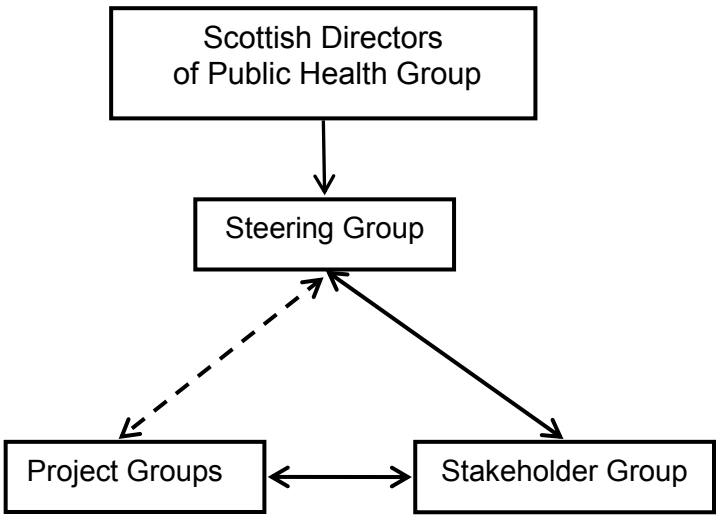

Figure 3.5: The structure of the Scottish Public Health Network (dashed line indicates weak links)

3.4.2 Steering Group

The steering group of ScotPHN consists of membership from multiple organisations responsible for delivering health improvement and health services in Scotland. Most of the members were from within the NHS, but the group included voluntary sector and local authority representatives. At the time of the study the steering group comprised of representatives as shown in Table 3.2.

Table 3.2: Membership of ScotPHN Steering group (2009)

Membership	Numbers
Scottish Directors Public Health	3
Scottish Government (Health Department)	1
Medical Director (ISD)	1
Senior Specialist Public Health Medicine	1
Public Health Consultant	1
NHS Health Scotland	2
Health Promotion Managers Group	2
Health Protection Network	1
Local Authorities Health Improvement Officer	1
Specialist Trainee Registrar	1
Voluntary Sector	1

The chair of ScotPHN was a Director of Public Health and was also the chair of the Scottish Directors of Public Health group. The steering group meetings were held every two months. They identified and prioritised projects that needed to be taken forward. The group monitored the progress of on-going projects. It also ensured governance arrangements and quality assurance before signing off the final project outputs.

3.4.3 Stakeholder group

The suggested function (NHS HS, 2005) was to oversee the functioning of the project group. It comprised of multisectoral and multidisciplinary public health practitioners representing groups such as: the DPHs, heads of health promotion, dental public health, COSLA, local authority, Scottish government, Scottish Consumer Council, Communities Scotland, Community Health Exchange, Health Protection Network, Voluntary Health Scotland, public health nursing, pharmaceutical public health, academia, public health practitioners, consultants, registrars, nutritionists and a range of related health protection networks, Faculty of Public Health, Scottish Partnership Forum, Scottish Health Council, Regional Public Health Network and regional planners. A stakeholder event was proposed to be held once a year. At the time of the study the

group comprised of thirty members. However, the ScotPHN paper work does not specify how frequently the group would meet and the manner in which it would deliberate and put forward its viewpoint. Typically for each project there could be a one day stakeholder event and a stakeholder review of the project draft obtained through a questionnaire and written feedback.

3.4.4 Project groups

These were short-lived groups, (approximately six months in duration), pulled together to take forward pieces of work identified by the ScotPHN. Each project group comprised of a lead author, a network coordinator, a lead consultant, a project researcher and other group members. There were a number of on-going projects at the time of the study. An on-going project on HIV Health Care Needs Assessment was chosen to be included as part of this study. The membership of the project group was as shown in Table 3.3.

Table 3.3: Membership of the HIV Health Care Needs Assessment Project Group (Johnman, 2009)

Role within Project Group	Title and professional expertise
Chair	Consultant in Public Health Medicine, Chair of Blood Borne Viruses and Sexually Transmitted Infections Prevention Network
Lead author	Specialist registrar in Public Health Medicine
Coordinator	ScotPHN co-ordinator
Member	Consultant in Genito-urinary Medicine, Chair of Scottish HIV and AIDS group (SHIVAG)
Member	Chief Executive HIV Scotland (voluntary sector)
Member	Lead consultant of ScotPHN
Member	Consultant in Infectious Diseases
Member	Consultant in BBV/STI Section, Health Protection Scotland
Member	Research support ScotPHN

It can be seen that the project group was relatively small and had limited representation from outside the NHS. The key activities of ScotPHN namely the production of healthcare needs assessment reports were prepared by the project group with extensive input and scrutiny from others. The process of developing a health care needs assessment for the HIV project comprised of a number of stages as shown in Figure 3.6. In general, it can be seen that the conduct of an HCNA follows a process whereby the draft report goes through the steering group, the stakeholder group, a scrutiny panel (included people living with the condition), the directors of public health, the Scottish government and a range of other professionals prior to it being finalised. It was however unclear how inputs from various groups, in particular the stakeholder group were incorporated into the final report. It was also not entirely clear what processes the penultimate draft report was subjected to before being finalised. These issues will be discussed later.

3.5 Summary

Public health in Scotland is being delivered by a range of networks. Delivery of public health requires assessment of healthcare needs which in Scotland is being undertaken by the Scottish Public Health Network (ScotPHN) which came into being after the demise of the Scottish Needs Assessment Programme (SNAP). ScotPHN was intended to be developed as a managed clinical network functioning via a steering group, a stakeholder group and project groups.

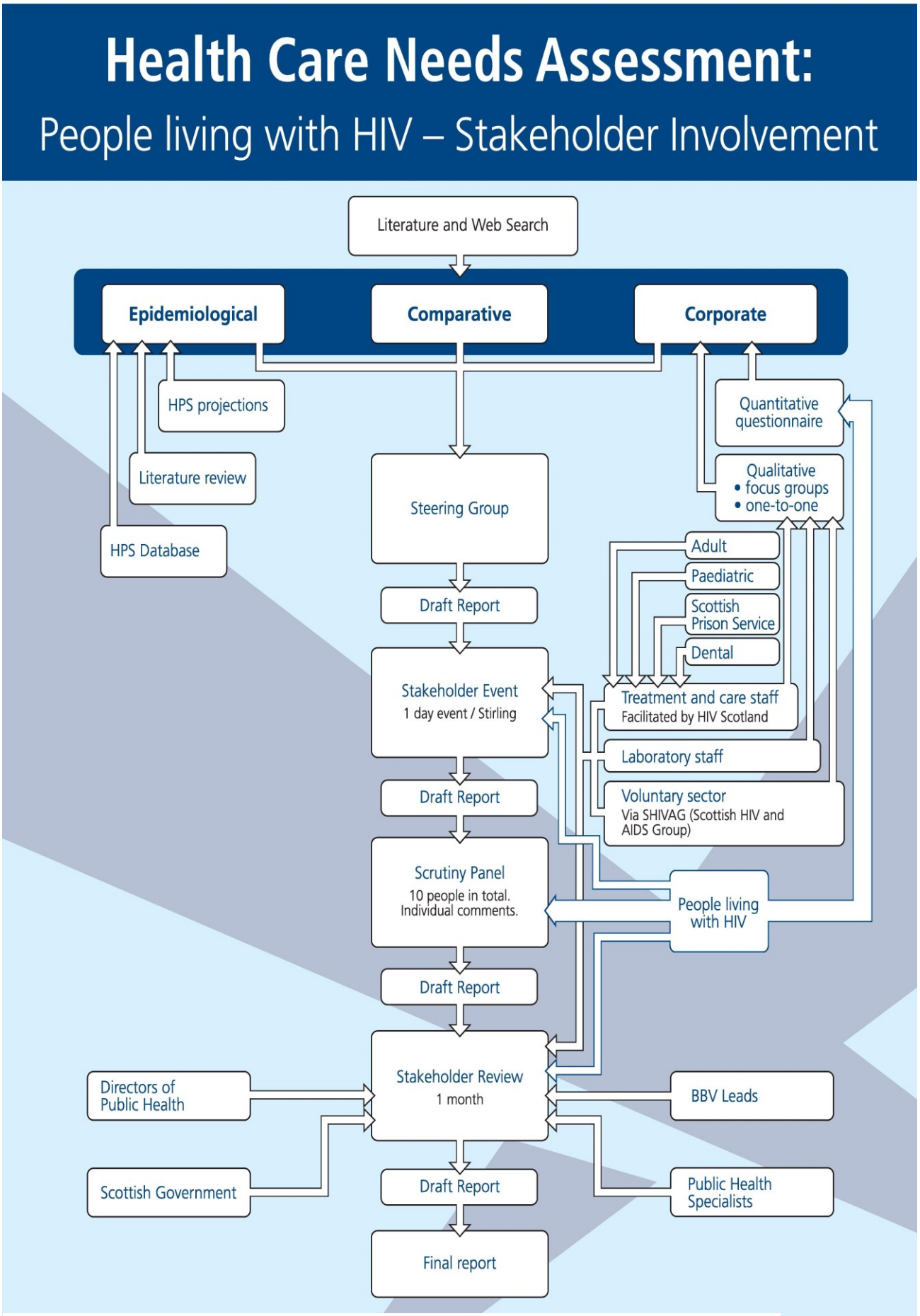

Figure 3.6: The process of HIV Health Care Needs Assessment Project.
(*Provided by ScotPHN*)

ScotPHN

4

Research methodology

4.1 Introduction

As discussed in Chapter 1, this research focuses on how the functioning and nature of public health networks impacts on their ability to mobilise knowledge.

The aim of this study was to examine the functioning of ScotPHN (discussed in Chapter 3) particularly with reference to its role in mobilising knowledge. This Chapter discusses the methodological approach used to realise this aim. It discusses the constructivist grounded theory approach used in this study and the manner in which it

has influenced fieldwork, analysis and the review of literature. In this chapter I also discuss ethical issues associated with this study in particular those related to researching in familiar settings and with peers as subjects. The chapter concludes with the details of the way in which data were obtained, analysed and interpreted.

It is well acknowledged that the ontological and epistemological position of the researcher informs his/her methodological considerations and choice of research methods (Cohen et al., 2005; Cresswell, 2007:42). Association to a particular paradigm may be explicit or implicit (or both) and affects and informs the way a researcher perceives a particular problem and how the researcher goes about researching it. It is a necessary exercise for the researcher to try and bring their own worldviews, paradigms or sets of beliefs and values to the fore (Cohen et al., 2005). These have a fundamental bearing on the way the researcher sees the world as they determine and shape the researcher's understanding of how things are connected. Guba and Lincoln (1994:107) define a research paradigm in the following terms:

> A paradigm may be viewed as a set of *basic beliefs* (or metaphysics) that deals with ultimates or first principles. It represents *a worldview* that defines, for its holder, the nature of the "world", the individual's place in it, and the range of possible relationships to that world and its parts … The beliefs are basic in the sense that they must be accepted simply on faith (however well argued); there is no way to establish their ultimate truthfulness. (Guba and Lincoln, 1994:107)

This study aligns with the interpretivist paradigm and utilises a social constructivist variant of grounded theory, propounded by Charmaz (2006:131). Within the interpretivist paradigm social reality is constructed and is not value free. The interpretivist paradigm moves towards a more subjectivist world where the reality can

only be known through the interpretation of the knower. The knowledge claims are the subjective interpretation of social reality and meaning making in the social situation.

Interpretivist researchers are interested in understanding individuals' interpretations of the world and particular contexts or situations rather than finding universal laws and rules (Cohen et al., 2005:23). My interest lies in understanding the experiences of individuals and the ways in which they make meanings of their multiple realities through complex interactions and dialogue**.** The choice of inductive qualitative methods such as grounded theory, is useful as they are effective in exploring and making accessible worlds about which a researcher might be curious (Corbin & Strauss, 2008:13). In particular they help in ascertaining the 'how', 'why', and 'what' of individual or group experiences. As the study is focused on establishing the complex understandings and experiences of individuals, talking directly and observing interactions with people was helpful in allowing them to express their world views unencumbered by what we expect in literature (Cresswell, 2007:40). The inductive approach also helps in understanding the context or setting of the participants of the research and makes links between their associations and relationships. The subjective, exploratory, descriptive and interpretative nature of qualitative research helps the researcher to reach an in-depth understanding of social contexts and the subjective contexts of those who experience them (Corbin and Strauss, 2008); such contexts are particularly relevant to this study.

4.2 The Grounded Theory approach

Inductive approaches to qualitative analysis owe a heavy debt to grounded theory. The theory, as a qualitative research methodology was founded by two American sociologists, Barney Glaser and Anselm Strauss in the 1960s. They were exploring the experience of the dying in a hospital setting (Glaser and Strauss, 1965, 1967). They constructed their analysis through field observations, discussions with professionals and terminally ill patients (Charmaz, 2006:4). Glaser and Strauss believed that theories should be grounded in data from the field depicting actions, interactions, or processes of people experiencing the phenomenon, thus providing an opportunity for the generation of a theory (Cresswell, 2007:63). Grounded theory also brought about a greater sophistication in qualitative research in a time when qualitative research in sociology was "losing ground" (Charmaz, 2006:4). This approach was in stark contrast to the deductive methods used in quantitative research that test an already existing theory rather than developing a theory from new data (Birks and Mills, 2011). The "golden age of rigorous qualitative analysis" thus benefited from the robust approach of the grounded theorists (Denzin and Lincoln, 2005:16). After the original enunciation of the theory by Glaser and Strauss in the sixties, subsequent decades saw some differences emerge in the details of the approaches put forward by its two founders. Kelle (2005) provides an insight into the points of disagreement between Glaser and Strauss.

The key difference of opinion in relation to the grounded theory methodology was with regard to a researcher's underlying philosophical position. Glaser saw grounded theory as a process of discovery in which the analyst constantly compares indicators, concepts and categories in the collected data, as the theory emerges. Strauss on the other hand

aimed to develop a theory from the outset. According to Kelle (2005) Strauss's approach uses a well-defined 'coding paradigm' and always looks systematically for 'causal conditions,' 'phenomena/context, intervening conditions, action strategies' and 'consequences' in the data. Approaches that adhere to such strict grounded theory steps have been termed as objectivist by Charmaz (2006:131-132).

Charmaz (2006:131) distinguishes an 'objectivist grounded theory' from a 'constructivist grounded theory'. She suggests that the objectivist grounded theory that some of its founders (e.g. Corbin and Strauss, 1990) subscribed to, "resides in the positivist tradition and thus attends to data as real in and of themselves and does not attend to the processes of their production". She distinguishes an 'objectivist grounded theory' from a 'constructivist grounded theory'; the latter constantly gets constructed through shared experiences and relationships with participants and the researcher's own interpretations.

> My approach explicitly assumes that any theoretical rendering offers an *interpretive* portrayal of the studied world, not an exact picture of it…. Research participants' implicit meanings, experiential views – and researchers' finished grounded theories – are constructions of reality. (Charmaz, 2006:10)

This approach reflects multiple and diverse perspectives where the researcher is positioned as a participant in data collection and analysis. This approach served as a guide and pathway for me to learn about ScotPHN and the varied realities offered by those associated with the network. It is in consonant with the interpretative stance that I have adopted.

4.2.1 The influence of a constructivist approach on fieldwork and analysis

The network (ScotPHN) setting encompassed a complexity of views and subjective meanings created by its individual members, being negotiated socially and formed through interaction with others and through "historical and cultural norms that operate in individuals' lives" (Cresswell, 2007:21). Accordingly grounded theory methods are best suited to this complex social situation, as they seek to elicit participants' world views and the context of interaction. The focus was on exploring the experiences and interactions of network participants on the delivery of public health particularly with respect to knowledge mobilisation.

I employed the approach put forward by Charmaz (2006). The key concepts of grounded theory in this approach can be summarised (Charmaz, 2006:178) as follows:

- The grounded theory research process is fluid, interactive and open ended
- The research problem informs initial methodological choices for data collection
- Researchers are part of what they study, not separate from it
- Grounded theory *analysis* shapes the conceptual content and direction of the study; the emerging analysis may lead to adopting multiple methods of data collection and to pursuing inquiry in several sites
- Successive levels of abstraction through comparative analysis constitute the core of the grounded theory analysis
- Analytical directions arise from how researchers interact with and interpret their comparisons and emerging analysis rather than from external prescriptions.

At the time of research initiation, while I had a general idea of the kind of questions that I expected my research to address, I did not have a detailed list of questions that I was expecting to be answered from it. Consequently I simply presented the aim of the

research to ScotPHN as: “to understand and explore network members’ lived experience of engaging in Scottish Public health network activities, their beliefs, assumptions, values and experiences, network governance, with an aim to find out how knowledge and policy is generated through combined effort”.

It has been recognised that using a tightly prescribed interview schedule is inimical to constructivist grounded theory methodology as it risks pre-framing the problem and obscuring real issues (Elliot and Higgins, 2012). I recognised that while it was necessary to maintain some structure to the interview, the number of questions asked were few and open ended, allowing the participants to make their own interpretations when responding to these. All interviews started with basic, simple questions which elicited the opinions of the responders on the role of ScotPHN and the network’s facilitators/barriers, (these are discussed later in this chapter). Due to the absence of a tightly prescribed interview schedule and the general nature of discussions there was in some cases a need for further elaboration on specific themes. These were addressed through somewhat more focussed second interviews with a few participants to delve into specific issues that came through in the first interview. This is a well-established way of working in grounded theory.

In terms of analysis, the absence of a tightly specified interview schedule meant that Corbin’s more objectivist approach (Strauss and Corbin, 1990, 1998) of utilising a well-defined 'coding paradigm' which looked systematically for 'causal conditions,' 'phenomena/context, intervening conditions, action strategies' and 'consequences' in the data could not be adopted. I believe that this helped in themes emerging organically from the data rather than being imposed by preconceived ideas and coding paradigms.

The constructivist approach requires the researcher to be involved in meaning making and sharing experiences with participants (Charmaz, 2006:130) rather than being a "distant expert". My position as a staff member of Health Scotland helped me in achieving this; I was an insider while being relatively distant from the network being examined. However, as an insider, with knowledge of public health issues, I was not far removed from the context (delivery of public health priorities) from which the data for this study emerged. As someone employing a constructivist approach, I tried to elicit the responders' definition of terms, assumptions, implicit meanings and tacit roles. As discussed above a few participants were re-interviewed to ensure that the meanings being constructed really reflected their position correctly.

4.2.2 The influence of a constructivist approach on the literature review

Glaser and Strauss (1967), the main proponents of grounded theory strongly argued against literature review prior to any data collection. Over the years there has been considerable discussion on when a literature review should be conducted and how extensive it should be (Cutcliffe, 2000; McGhee et al. 2007). The reasons behind abstinence from literature are to permit the emergence of categories from the data without being biased by extant hypotheses and theoretical frameworks. Avoiding the imposition of predetermined understanding by reading the literature prior to data collection has been supported by other authors (Nathaniel, 2006; Holton, 2007). Charmaz (2006:166) suggests that while one may have had to read prior literature to develop a research proposal the researcher should "let this material lie fallow" until the categories have been developed and analytic relationships established between them.

This clearly cannot be an easy task as tacit knowledge developed from a literature review cannot lie dormant.

A number of authors have presented benefits, when using a grounded theory, of undertaking a literature review prior to data collection (McGhee et al. 2007; Creswell, 2007; Urquhart, 2007). Dunne (2011) enumerates the benefits as follows:

1. It provides a rationale for the study
2. It ensures the study has not been previously conducted and highlights lacunae in existing knowledge
3. It helps contextualise the study and orient the researcher
4. It helps a researcher develop sensitising concepts, gain theoretical sensitivity and avoid methodological pitfalls and unhelpful preconceptions
5. It promotes clarity in thinking about concepts and possible theory development

It has been argued that a researcher's open-mindedness should not be mistaken for empty-mindedness (Coffey and Atkinson, 1996:157) and therefore a literature review is essential.

The reasons for this study lie in my personal experience in the area of public health. I felt that networks were being formed as an answer to almost every issue that emerged in the public health arena. Further, as a member of some of these networks, I felt that there were aspects of public health knowledge that emerged in network discussions which did not find a place in key reports and policy. As a result I was familiar with some parts of the literature on this topic of study. I had a good understanding of the public health literature and was also well aware that successful health improvement not only required

multisectoral input but also required practitioners to be working in partnership. I did consider whether this knowledge would prevent me from undertaking grounded theory research. McGhee et al. (2007) suggest that prior awareness of literature should not prevent the use of grounded theory but the researcher should use reflexivity to prevent prior knowledge distorting the researchers' perception of the data. As a result I remained constantly vigilant and reflexive on how my background and awareness impacted upon the research process. One of the techniques used was memo writing (discussed later in this chapter) to help me remain aware of the effects my background knowledge could have on the emerging theory.

During the course of the study it became apparent that the subject area required an understanding in the area of knowledge mobilisation. Literature on this subject was examined after a few interviews had been conducted and I had started to analyse the data. It is at this stage I developed an understanding of the concepts discussed in Section 2.4. This facilitated what McMenamin (2006) terms as establishing the "intellectual geography" of the thesis.

The need to examine the literature on policy networks (Section 2.5) was felt after the data had been analysed and categories developed. It was the analysis which led me to wanting to understand the existing literature on network typology: their organisation, their closedness and the influence of power in these settings. It also became apparent at this stage that medically trained members exerted considerable influence in these networks. It was then that literature on professionalism associated with public health was examined (Chapter 6).

4.3 My position as researcher – associated ethical issues

Macfarlane (2009) undertakes an extensive discussion on researching with integrity. The key virtues put forward by him that are particularly relevant to this study are courage, respectfulness, sincerity, humility and reflexivity (p:5). With respect to courage Macfarlane suggests that the researcher should be willing to abandon strongly held views (p:56) and should also have the courage to deploy new research methods. Apart from the belief that the network being examined was expected to generate knowledge (which was its explicitly stated function) to support public health in Scotland, I did not hold any other strong views on how it should function to achieve this objective. An element of courage was, however, required in the choice of the research method, viz. grounded theory, which has not been previously employed in the analysis of networks but appeared to be most suited for my research. Respectfulness is a virtue which requires researchers to ensure that they do not deceive the participants (Macfarlane, 2009:63). Hammersley and Traianou (2007) describe such respectfulness as autonomy "…a process that displays respect for people in the sense of allowing them to make decisions for themselves". Respect for the autonomy of participants and the preservation of their privacy has been described as an extrinsic value by the authors (Hammersley and Traianou, 2012:134).

In this study there was no attempt to deceive the participants and the subject of research was made apparent. It was also clearly explained that their identity would not be revealed. It is, however, important to point out that most participants were influential and authoritative individuals not only willing to talk about the subjects but also happy to be quoted. Macfarlane (2009:67) notes that respectfulness is a virtue linked to possible

inequalities in power relationships in contexts where, for example, subjects may suffer from poverty and lack of literacy. Poor communication in such cases can affect informed consent. Although this was clearly not the case for this study issues associated with respectfulness and confidentiality were taken very seriously and practical steps taken to ensure these are further discussed later in this chapter as part of the section on data sources.

As mentioned above, most participants of this study were established professionals in positions of power. Macfarlane (2009:74) refers to a bias which may arise through the interest or the concerns of powerful actors who could be sponsoring the research. The research problem in this study arose from my professional interest, and the research questions were my own. In other words the research problem or even the line of enquiry did not emerge from any group or organization. The study was also almost completely self-sponsored.

The fact that the research subjects were professional peers implied that they were relatively well informed about the research process itself and understood the consequences of participation. With regard to researching with professional peers Macfarlane (2009:66) states that in such cases "their education and position as peers means that their consent is probably quite informed, or, in other words, based on fuller understanding of the implications of participating in the study". There are however additional issues which arise when researching with peers and in familiar settings which are discussed in the following sections.

Another important virtue is that of sincerity. Most important is this regard is the issue of concealment or exaggeration of findings (Macfarlane, 2009:99). Hammersley and

Traianou (2012:134) term a researcher's production of sound knowledge and his/her avoidance of putting forward false claims as intrinsic values of research. As a researcher I was very conscious of this and ensured that I considered all available data and made a conscious attempt to resist emphasising some results while masking others.

Macfarlane (2009:109) puts forward humility with regard to contribution to knowledge by a researcher as another important virtue. While analysing the results of this study and examining the existing relevant literature related to my findings I became aware that there was considerable previous research on both knowledge mobilization and functioning of networks (though the two had not been previously linked) whose results echoed what I had found. Finding that such related research existed was humbling and I have attempted to report all relevant previous research that I am aware of in this regard.

Reflexivity, another virtue discussed by Macfarlane (2009:123), involves not only being "honest or open" but also being "able to articulate thoughts and practices which we may well take for granted or are not particularly aware of". In this regard I found it useful to follow the criteria put forward by Silverman (2006:275-276); the details of which are included later in this chapter (section 4.8).

The motivation behind choosing the research topic was the fact that the field of study affects my own professional practice, and researching within the work context provided ease of access and insight into the activities of ScotPHN and other networks within the public health policy context. As the research site was partially based within my workplace, I was aware of a range of additional issues that could impact upon the objectivity of interpretations that could compromise the soundness of knowledge being

produced. In concordance with Hockey (1993), I addressed these additional ethical issues under two themes: researching in familiar settings; and conducting research with peers as subjects. These are discussed in the following sections.

4.3.1 Researching in familiar settings

Having worked in the area of public health I was clearly an insider to the subject area. Also since the network under consideration was hosted by the organisation I worked for, this further enhanced my familiarity with the settings. A number of researchers have decried *a-priori* insider knowledge; for example, Spradley (1979:58) argues that for an insider the language may be too familiar resulting in key terms being overlooked and the data analysis may be difficult because the researcher takes for granted the tacit patterns and regularities of the culture being studied. Jarvenpa (1989) argued that an insider may not experience the entry shock which a traditional outsider will; thus may ignore meaningful behavior or subvert the treatment of sensitive issues.

Many researchers, on the other hand, have levied criticisms on researchers from the outside. Nash (1963) suggests that the shock experienced by an outsider in an anxiety provoking situation may result in a researcher from the outside developing and maintaining strong inflexible "black and white" views. This can result in the researcher recoiling from a strange situation rather than pursuing it with curiosity (Hockey, 1993:204). It has also been suggested that *a priori* knowledge generates an understanding of the situation and helps build a rapport with the research subjects (Aguilar, 1981). Furthermore, an insider is less likely to be treated with the fear and suspicion that an outsider may experience (Nukunya, 1969).

I felt that I managed to exploit the advantages of being an insider as well as being an outsider and experienced none of the disadvantages associated with the two. As noted previously, I was an insider as the network was hosted within the organisation I worked for and I had a good understanding and knowledge of public health. Being an insider helped me in understanding the wider health, social and political issues that form part of the public health debate. At the same time I was not directly involved with the network or its workings. Most of the participants included in this study were from other organisations, i.e. not from the organisation that I worked for.

Delamont (1981), who conducted research on school classrooms, suggested a number of strategies which could be employed when researching within familiar settings. One of the strategies suggested is that the researcher examine a different classroom; one which is unfamiliar to the researcher. In the context of the current research, I was not familiar with the network that was the subject of my research. I also examined published literature on Managed Clinical Networks which were outside the public health setting. This helped me to gain further insight into the public health network and to compare it to a clinical setting of a managed clinical network. It also helped me understand the intrinsic difficulties associated with public health settings in comparison to a relatively well focused clinical setting scenario handled by the managed clinical networks. I believe that by focusing on this unfamiliar territory the familiar was highlighted.

While I was aware that researching within my own workplace can introduce a 'bias', it helped sensitise me to utilise my knowledge and experience to ask particular kinds of questions about the research topic. This notion of sensitising concepts (Bulmer, 1969) was helpful in developing initial ideas to inform the topic of study. For example, my

experience of working with a range of networks within the health sector made me interested in networks as places that are experienced differently by different stakeholders. Charmaz (2006:16) points out that these general concepts can sensitise us to ask particular kinds of questions about a topic and about our data. However, she adds the cautionary note that sensitising concepts and disciplinary perspectives provide a place to start, not to end.

Stephenson and Greer (1981) have suggested the adoption of artificial naivety on the part of the researcher. Since the network was considerably alien to me and comprised of senior professionals from around Scotland, I was largely unfamiliar with its functioning. Thus the naivety on my part as a researcher was not completely artificial. Further I consciously avoided "taking for granted" aspects associated with public health networks. Thus I was a stranger (or an outsider) to the network and its activities in many respects and consciously attempted to become one in others. However, it has been noted that even outsiders can very quickly become insiders. Heilman (1980) has suggested that sometimes strangers (in a research context) wanting to become natives irretrievably "go native", suggesting that they imbibe the values and experiences of the new environment they are investigating. At the same time the opposite can also happen when the natives (i.e. researchers who have similar values and experience of those being studied) would try and look at things as a stranger would, and thus "go stranger".

4.3.2 Researching with peers as subjects

Many of the issues associated with researching peers are similar to those discussed with respect to familiar settings. Platt (1981) suggested that personalised relationships and friendships make it difficult to distinguish between formal and informal (i.e. research

and friendship) aspects of the response. In the context of the current research I had no friendships or even working relationships with any of the respondents. I quickly learned about the work being done by the members of the network. However, I could be regarded as anonymous to most of them.

When researching peers another issue raised is that researchers do not receive the full information from the peers being interviewed, as the peers often assume that the interviewer is more likely to have certain knowledge and that there is no need to elaborate on certain issues (Hockey, 1993). The strategy employed in this study to ensure that I got as full information as possible was to initiate interviews with very basic and often very open questions.

Another issue that relates to both inside (peer) and 'stranger' research is associated with status differences between the researcher and the respondent. A classic case noted is that of a relatively wealthy western researcher and his/her poor respondents (Bleek, 1979). Similarly cases where the researcher has a status lower than that of his/her respondents, have been discussed in previous research (Riesman, 1958). Scott (1984:171) talks about not interviewing peers but individuals with different positions, thus making the definition of a peer problematic. In the context of this study most interview respondents were either of a similar or of a higher status. While interviewing respondents (both having similar and higher status) I was conscious of the problems that such encounters pose. However, at no stage did I feel being patronised or talked down to and was always fully in control of the interactions. While interviewing respondents who might be perceived to have a lower status, I was sensitive to possible sources of tensions (e.g. their fear of being talked down to, or in other cases being skeptical about the research),

and acted accordingly by emphasising genuine interest in the participant which helped to bridge barriers. It was only in the case of one respondent (whose organisation was funded by the organisation I worked for) where I felt that the response was guarded, measured and words were chosen with great care in the initial part of the interview. However, with continued discussion the respondent opened up to a large extent.

Denzin and Lincoln (1998:297) suggest that all ethnographic studies have contextual, taken for granted, tacit knowledge that plays a part in meaning making, both for the researchers and the researched. One can argue that this insight applies to all studies. Researchers can only aim to produce second or third level accounts of what is happening in the real world experiences of those being researched. This suggests that:

> …. researchers should accept the inevitability that all statements are reflexive, and that the research act is a social act (Denzin and Lincoln, 1998:298).

Thus it can be said that all research is susceptible to prejudice, experimenter bias and human error. It is acknowledged that organisational, professional and personal contexts will affect the way a piece of research and development is undertaken. With this in view, I made a conscious effort to employ my chosen methods in a way that reduced the potential harmful effects of partiality or bias. This was done by being constantly aware of my theoretical position; repeatedly explaining why and how certain events or data were recorded; providing clarity on any categories that I developed in data collection and analysis.

4.4 Access to ScotPHN and ethical approval

I presented a proposal for the research at one of the steering group meetings (Pankaj, 2009) and the network provided its support for this research. Advice was sought from the West of Scotland Research Ethics Services in Glasgow. I was advised that since this study fell within the remit of service improvement and did not involve any service users there was no need for any formal ethical approval.

4.5 Data sources

The data analysed in this study were obtained from three different sources: (a) feedback to the consultation paper on the proposal to develop a Managed Public Health Network for Scotland; (b) interviews with the ScotPHN steering group, project and stakeholder group members; and (c) observations at two ScotPHN steering group meetings. The details of these data sources are discussed in the following sections.

Data from consultation feedback were analysed separately from those obtained from interviews and observation of meetings. The reason for this was that the former related to a period before the formation of ScotPHN and the latter after its formation. The purpose and format of collecting data was also clearly different for the two. It is important to note that while the data were collected separately, the approach used for analysis was the same.

4.5.1 Consultation feedback

The seeds of ScotPHN were planted in 2005 with a proposal to develop this network initiated by the Directors of Public Health across Scotland. The proposal in the form of a consultation paper entitled, A Managed Public Health Network for Scotland was circulated to the public health workforce (with a variety of roles within the NHS) for comment and feedback. The views of the workforce were sought on how they saw the network was likely to develop. The key areas for feedback were in the form of the following questions:

1. What do you see as the main purpose of the network?
2. What should be its main aims and objectives?
3. What should be the key topics or specialist areas of the work programme?
4. Do you have any areas of work which could be a priority for the network to take forward in the near future, identifying why you think there is such as need, who would benefit from it being addressed on a Scottish basis rather than at a local level, and who would be some of the key individuals to carry out such work?
5. Having thought about the main issues and information in the attached paper, are you broadly in agreement with the proposal for a Managed Public Health Network for Scotland?
6. Have you any other comments you feel should be considered at this stage?

It can be seen that these questions asked within the consultation exercise did not aim to elicit responses related specifically to the functioning and knowledge mobilisation aspects of the proposed network; areas which forms the focus of this study. Further the questions were not sufficiently open ended to elicit detailed thoughts, feelings and

concerns. Such elicited texts obtained from questionnaires have been used for grounded theory research; however some problems with these have been suggested by Charmaz (2006) as follows:

> As in questionnaire construction, researchers who use elicited texts cannot modify or reword a question once they ask it. Nor do they have any immediate possibility of following up on a statement, encouraging a response, or raising a question even when they may be able to interview research participants later. (Charmaz, 2006:37)

In spite of the above problems with the consultation feedback data, I felt that they would provide some insight into stakeholder expectations from ScotPHN which was then being constituted. I also wanted to compare the pre-formation expectations to the post-formation reality of the network.

It is important to note that I was neither involved with the proposal nor with the feedback process which was handled by one of my colleagues from NHS Health Scotland. He collated the responses to each of the above questions. The responses were not subjected to any analysis by NHS Scotland. Full responses as well as the collated version were made available to me for research.

Participant characteristics

The participants of the consultation feedback can be divided into the following eight groups.

1. DPH: Directors of Public Health from the health boards
2. LA: Health improvement officers from Local Authorities
3. HPM: Health Promotion Managers from the health boards
4. PHP: Public Health Practitioners who were members of the PHP Learning Network

5. SG: Scottish Government including the Office of the Chief Executive Officer and the Scottish Government Health Department
6. UA: University Academics with public health research interests
7. CPHM: Specialists of Community Public Health Medicine
8. OT: NHS public health workforce members who do not fall into the above categories.

In total 42 responses were received to the consultation paper, the details of which are provided in Table 4.1. It is important to note that views of the voluntary sector providers of public health services or the service users were not sought.

Table 4.1: Participant details of the consultation feedback

Participant role	Number of responses sought	Number of individual responses	Number of group responses	Total number of responses
DPH	21	3	5	8
LA	31	3	1	4
HPM	19	1	2	3
PHP	18	5	1	6
SG	6	1	0	1
UA	9	9	0	9
CPHM	73	7	0	7
OT	4	4	0	4
Total	**181**	**33**	**9**	**42**

Table 4.1 indicates that the response rate was 23%. While most of the responses (33) appeared to be individual views, some others (9) responded on behalf of their organisation or associations. In the latter case it was made apparent that they had held meetings to discuss the consultation document.

Confidentiality issues

During the above collation of data the participants were told that all responses would be treated in confidence and the comments would not be identifiable to any individual or group in the final collation of the report. The entire raw data were provided to me with a similar expectation. As a result the respondents will subsequently be identified using symbols W1 to W42.

4.5.2 Interviews and observation

As noted earlier, consultation with regard to the formation of ScotPHN was conducted in 2005. The ScotPHN was formally constituted in 2006. It had been operating for almost four years when I initiated my study on the functioning of the ScotPHN network.

I developed a study proposal (Pankaj, 2009) whose aim was to explore the beliefs, assumptions, values, experiences and dynamics of interactions of those involved with the activities of ScotPHN. I contacted the chairman of the ScotPHN steering group who then invited me to present it at a steering group meeting. The steering group agreed to support the study. I was invited to attend steering group meetings as an observer. I was also permitted to record the discussions during the meetings. Two steering group meetings were attended and recorded.

Consequent to receiving the support from the steering group, I e-mailed a number of steering group members. Initially five members representing multiple sectors and public health roles within ScotPHN were selected for interviews. Subsequently it became apparent that to obtain a fuller picture, interviews with members from the HIV project

group and stakeholder group should also be conducted to get an understanding of how knowledge was actually being mobilised. As a result interviews were conducted with members from these groups and additional members from the steering group. Interviews were conducted in the offices of the participants.

Charmaz (2006:26) suggests that interviews can be initiated through broad, open-ended non-judgemental questions permitting unanticipated statements and stories to emerge. In this regard all interviews were initiated with the following two questions:

1. What in your opinion is the role of ScotPHN?
2. What are the barriers and facilitators in the functioning of ScotPHN?

These were then followed up by detailed discussion of the emerging topics. All interviews were open-ended with an evolving focus. The style of interview and broad opening questions were meant to facilitate the building of rapport with the participants. This style also encouraged the co-construction of a narrative and allowed my understandings to evolve rather than start from an assumptive position. This meant that the discussion often moved from general to very specific areas. I drew from the perspective provided by Holstein and Gubrium (1997) where the participant in the interview was seen as actively contributing to making meaning and constructing knowledge.

My response included active listening and empathetic reflection. As the interviewees were experienced public health leaders they needed practically no encouragers. I was aware that relative differences in power and status may be acted on during an interview (Charmaz, 2006:27). Many of the participants took charge and addressed the interview

topics on their own terms. In many cases the timing, pacing and length of interviews were largely directed by the participants. The responses, however, tended to remain within the broad scope of this study. As a result participant responses were followed with relevant prompts in accordance to the principles of qualitative interviewing. The interviews were permitted to flow for as long as it was convenient for the participant and lasted between one and three hours (sometimes with breaks). I recorded all interviews and made brief notes, as and when required, particularly when the body language or tone did not fully match the words being spoken.

While interviews fit grounded theory methods well and are often used as a single method for gathering data, this study used observation of steering group meetings to complement the interview data.

Participant characteristics and sampling

The steering group had a total membership of fifteen. In the two meetings that I attended, the members present were nine and seven in number, resulting in 60% and 47% attendance respectively.

Initial interviews were limited to five members of the ScotPHN steering group. Given that this group was the central focus of research it was a natural place to start. Charmaz (2006:101) points out that:

> Many quantitative research studies require random samples of people whose characteristics are representative of the population under study. Whereas quantitative researchers want to use their data to make statistical inferences about their target populations, grounded theorists aim to fit their emerging theories with their data.

The initial purposive sampling aimed to maximise variation in individuals' backgrounds and official positions (five members) and resembled the requirements of a quantitative study i.e. the selected members were: from different sectors; had varying job roles and were operating at different strategic/operational levels of public health practice. Initial purposive sampling was followed by theoretical sampling. Charmaz (2006:100) points out that "initial sampling in grounded theory is where you start, whereas theoretical sampling directs you where to go". It became clear after the initial interviews that the ScotPHN entity was not limited to the steering group but extended further to project and stakeholder groups, (links of these groups with the steering group have been discussed in Chapter 3). It was also felt that members from project and stakeholder groups were likely to present information-rich cases by virtue of their ground level involvement.

A total of 14 individuals were interviewed and their characteristics on the basis of ScotPHN group membership are presented in Table 4.2. It is important to note that some of the steering group members were also members of the HIV project group. For any such persons interviewed their number has only been counted once and as a member of the steering group. The characteristics of the participants on the basis of their job roles are presented in Table 4.3. None of the middle management practitioners interviewed were members of the steering group and all senior public health managers interviewed were members of the steering group.

Table 4.2: Categories of interviewees on the basis of membership

Interviewee membership	**No.**	**Symbols**
Steering group	7	SG1-7
HIV Project group	4	PG1-4
Stakeholder group	3	SKG1-3
Total	14	

Table 4.3: Categories of interviewees on the basis of their job roles

Interviewee job roles	No.	Symbols
Voluntary sector and local authority	4	VSLA1-4
Middle management health service practitioners	5	MM1-5
Senior public health managers	5	SM1-5
Total	14	

Confidentiality issues

Some of the issues associated with respectfulness and confidentiality have been discussed earlier in this chapter. In this study all participants were told that the data collected were for research purposes only and that they would be reported anonymously. However, during discussions it became apparent that most participants had no major confidentiality concerns. In my judgement it is unlikely that many of the responses would have changed if I had sought participant's permission to identify them. In spite of this confidentiality was taken very seriously in this study. In order to make sense of the research it was important to identify participants on the basis of the networks they were member of or on the basis of their job roles. Although aliases and codes were employed as shown in Tables 4.2 and 4.3 the possibility of deductive disclosure was a concern. Consequently it was decided that none of the quotations in this study would be readily attributed to anyone by defining both codes associated with membership and those with job roles simultaneously.

4.6 Data analysis

4.6.1 Transcribing data

The consultation feedback was available to me in the form of emails and email attachments. The volume of feedback varied from a few lines to three A4 size pages. On the whole the consultation feedback comprised around 30 A4 pages.

The meetings attended by me were recorded and transcribed as were all individual interviews. Initial interviews were transcribed by me to get a sense of the themes emerging. However, in view of my full time job all interviews and observation meetings were professionally transcribed. All interviews and observations were transcribed verbatim and included pauses and utterances. I read through the transcripts in conjunction with listening to recordings. I also compared my transcriptions with those that were done professionally for accuracy. This process also permitted me to achieve an engagement with the data. The total volume of transcribed records was approximately 450 A4 pages.

4.6.2 Coding and categorising data

The first three transcripts were subjected to line-by-line open coding to examine sections of text made up of individual words, phrases and sentences. Descriptive codes were assigned to meaningful units of texts (Charmaz, 2006:42-71). Some of the codes were merely descriptive, while others suggested intentionality or my interpretation. Highlighting and underlining were extensively used. Line-by-line coding helped me to focus strongly and inductively on what was being said. It helped in the generation of new ideas and their interpretation. I found it a good way to get started. Subsequent

coding involved larger chunks of texts comprising long sentences or paragraphs. All codes were identified using interviewee initials and the page and line number of the transcript.

Coding has been described (Charmaz, 2006:46) as the pivotal link between collecting data and developing an emergent theory. The language of the participants guided the development of codes and subsequent category labels. Illustrations of the initial coding process from extracts of interview transcripts are presented in Table 4.4.

Table 4.4: Example of line-by-line coding

Transcript excerpt	**Coding**
Excerpt from interview VSLA1 I have not been using my position in face to face meetings and it is important for the voluntary sector to know what pieces of work are being taken forward and HIV is a good example so we know that the work is being taken forward at a very strategic level with a strong research background and in which they can have a say and benefit from the findings.	Not feeling engaged; Expressing passive membership with little influence on group; Referring to voluntary sector in the third person; Seeing role as a user of information rather than a contributor to group
Excerpt from interview PG3 So while those stakeholders who are involved and interested in treatment and care were very, very involved, and had a collective ownership for what the network was publishing, and have been very complimentary about it, I know that there have been other stakeholders who are purely focused on prevention and are not interested in treatment and care. And I think, if anything, it's amplified that there is quite a split within HIV in Scotland.	Strong commitment of stakeholders for HIV; But diverse and conflicting expectations of stakeholders; Knowing that public health is complex even for a specific condition.

Coding permitted me to examine the data analytically and to begin rendering codes into categories. The sets of codes resulting from this process were then compared to identify common ideas and emerging themes for further investigation.

4.6.3 Forming categories

Through constant comparative analysis the codes were then collapsed into categories. At this stage it was the code rather than the data that I worked with permitting a level of abstraction. Codes which appear frequently or were distinctly similar were clustered together. Each transcript was coded separately and the generated codes summarised in a file comprising extended lists of substantive codes (Coyne and Cowley, 2006) along with the number of times they appeared.

The process of collapsing codes to categories was facilitated by continued questioning of the data in conjunction with its constant comparison. At this stage it was also found that some of the codes had lost their specific context (thereby becoming open to misinterpretation) requiring me to go back to the transcripts. During comparative analysis, interview data, categories and concepts were continuously examined and re-examined to find similarities and differences. Through this continuing process categories were refined to generate higher level analytical categories. Table 4.5 illustrates some of the categories that emerged from the comparison of codes from two transcripts. The clusters captured both the positive and negative aspects of the same sentiment.

Table 4.5: An example of collation of codes from a transcript

Codes	Categories
Collating information Linking with other networks Using communities of practice Bringing knowledge, understanding and experience Networking Using scarce resources Permitting equitable access	Sharing resources

4.6.4 Summative and reflective memo writing

I used memos extensively. While they were helpful throughout the study their usage varied at different stages. In the initial phase of the study I wrote memos to prevent me from becoming overwhelmed by the data. The memos at this stage of the research were largely summative, documenting my personal reaction to participants' narratives.

These memos helped me in making implicit thoughts explicit, thereby developing engagement with the data. Examples of summative/reflective memos are provided in Table 4.6.

Table 4.6: Examples of summative/reflective memos

Memo 1 - written after interview with VSLA1

I suspect that VSLA feels detached from the workings of ScotPHN. Did indicate that public health public health priorities of the network were misplaced – I got a feeling that she felt that the priorities were too public health medicine focussed. The statement, "I will have to do the ground work before I put forward an agenda item", appears to indicate power issues, i.e. a feeling of being overawed by the status of other network members.

Memo 2 – written after interview with PG3

A sense of real connection with the health issues and passion for meeting patient needs. There is also a sense that the HCNA process has been good in finding the needs and also coming up with the right solutions; though appears to suggest unhappiness with the fudging of the final report – I sensed that PG3 implied that this might have been to meet the needs of those in power. I also detected a lack of faith in what may follow next as implementation of findings.

Memo 3 – written after interview with SG4

The sense I have had from my previous interviews with practitioners at the ground level has been that they feel very little ownership of the network and its happenings. The reasons for this may have emerged from this interview with SG4, a public health consultant. My reading of the consultation paper was that the network aimed to engage with a wide range of public health practitioners. It appears to me now that it is more of a professional group catering for the needs of the directors of public health.

4.6.5 Developing categories and themes

The initial formation of categories was followed up by their further development through analytical processes discussed in the following paragraphs.

Comparison and reduction

An exercise of comparison and contrast was used to cluster categories. The process of clustering also helped identify linkages between categories and the formation of more theoretical themes. The process led to the initially identified categories being developed into "condensed" themes.

Analytic memo writing to develop categories

As discussed earlier the initial memos I wrote were summative and reflective in nature. Memos in the latter part of the study were analytic memos which were used to document the links between different categories. Analytic memos were compiled with cross referencing codes and emerging categories. Large poster boards with post-it slips were used to facilitate organisation of codes within themes and categories. Examples of analytic memos are provided in Table 4.7.

Table 4.7: Examples of analytic memos

Memo 1 There appears to be little knowledge mobilisation at steering group level particularly Mode 2 knowledge. On the other hand there is clear indication that some of this is happening within the HIV project group. Different sectors really seem to be contributing at the project group level. The voluntary sector is very enthusiastic and also very keen to push forward the area of work they promote. Since the project group is selected by the steering group, wonder if full knowledge mobilisation is being hampered by the steering of the steering group.
Memo 2 The powerful recognise the need for the voluntary sector within ScotPHN but they see them as someone who should be represented and not necessarily engaged. The voluntary and local authority sectors appear to be detached from the steering group. They feel little ownership of ScotPHN. This could be due to the status associated with the job roles which obviously has links to their capacity to influence the ScotPHN agenda. Furthermore ScotPHN is a generic network (meant to deal with a wide range of public health issues), whereas some of the other sectors deal with specific health topics.

Theoretical saturation

The term theoretical saturation was used by the first generation of grounded theorists to describe a situation in which "no additional data are being found whereby the sociologists can develop properties of the category" (Glaser and Strauss, 1967:61). At this stage the data collection concludes and the researcher may be satisfied that the dimensions of the developed categories have been adequately defined. The concept of theoretical saturation, however, has been a subject of considerable debate and disagreements. Some of these have been briefly summarised by Charmaz (2006:114). Firstly, Charmaz suggests that the grounded theory approach shares with other

qualitative approaches the hazard of assuming that categories are saturated when they may not be. Secondly Charmaz (2006:114) quotes Dey (1999), who prefers to use the term, theoretical sufficiency instead, to suggest that the term saturation is incongruent as it relies on the researcher's conjecture that the properties of the category are saturated. These and other questions can always cast a doubt on a researcher's claim of having saturated categories. In this study I considered the initial interview data several times without any preconceived framework, with as open a mind as possible. As discussed earlier in section 4.7.2, line by line coding of the first three of the five initial interviews revealed several categories. These interviews led me to expand the participant base after analysing the data. Interviews with two project group and two stakeholder group members gave rise to several new categories. Subsequent analysis of data from a steering group member and another project group member did not add significantly to the data. With this in mind, it appeared that sufficient information and insights had been attain by the 8th interview to provide what Dey termed as "theoretical sufficiency" (Dey, 1999:257). Subsequent interviews confirmed earlier accounts.

4.7 Validation

Validation assesses the "accuracy" of the findings described by the researcher. While validation may not be emphasised in some qualitative research approaches, it does have a significant role in grounded theory research (Cresswell, 2007:207). In agreement with Cresswell (2007:207-209) the strategies that I used for validation were as follows:

- I had a long engagement permitting persistent observation in the area of public health. This helped in understanding the culture and building trust with the

participants. Cresswell (2007) quotes Fetterman (1998:46) as "working with people day in and day out, for long periods of time, is what gives ethnographic research its validation and vitality". The above statement is perhaps equally valid for grounded theory research.

- As discussed earlier, I was always conscious of my position as an insider and how that might impact on impartiality. To minimise 'bias' I repeatedly explained to myself why and how certain events or data were recorded. I also provided a clear account of any categories that I developed in data collection and analysis.
- The initial purposive sampling attempted to interview participants with varying characteristics, i.e. people with varying job roles and sectors. Subsequent theoretical sampling was based on emerging themes and an aim to get a fuller picture on the functioning of ScotPHN. It therefore included members from project and stakeholder groups.
- Wherever there were discrepancies between accounts of the participants they were examined in detail. Almost all these discrepancies could be accounted for by relating the participants to their job role or job sector. This is discussed in the Findings Chapter 5.

4.8 Evaluating the grounded theory research

A reader of any study should be able to assess a researcher's processes of collecting data and carrying out analysis. For grounded theory research Corbin and Strauss (1990) put forward seven criteria requiring the researcher to provide information in their reports that will permit readers to carry out such an evaluation. These criteria are

somewhat prescriptive and relate primarily to sampling, catergory formation, and formulation of hypotheses. Interestingly there is no mention in these on the discussion of evidence such as, previous literature, for and against researchers' arguments. Almost all research requires and expects a discussion of the emerging results to be compared with existing research. Similarly there does not appear to be any emphasis given to reflexivity or self-disclosure by the researcher about his or her stance in the study. In the current study not only criteria that have been formulated for the evaluation of grounded theory research (Cresswell, 2007:216-17) but also those that are applicable to all research approaches (Silverman, 2006:275-276) were adopted. Key criteria are set out below.

- I have attempted to provide clear accounts of the criteria used for the selection of cases for study and of the data collection and analysis. As discussed earlier, the consultative feedback which comprised of 42 responses was analysed in its entirety. Selection criteria of initial and subsequent interview participants have been included earlier in this chapter.
- Data collection and record keeping was conducted in a systematic manner. These procedures comprised making identifiable yet anonymised participant lists, transcribing and memo writing, and have been discussed at length in this chapter.
- While the categories largely emerged from the data, I have acknowledged my position in this study. I was vigilantly reflexive on this account by constantly writing memos. I was aware that my understanding of public health could have

had a bearing on the emergence of the category associated with multisectoral and multiagency working.

- All attempts were made to carry out the study in a systematic manner. With respect to the consultation feedback I was clearly constrained in terms of data availability, i.e. I could not go back to get more data. However, the data seemed a good source of information in further sensitising me to the context of the network and participants' perspectives.
- Details on how themes and categories have been derived are discussed in this and the following chapter. One of the key tools I used was to conceptualise and derive relationship through the use of diagrams. Many of these have been included in this study. Diagramming and creation of visual images of categories, their relationships and emerging theories has been considered as an intrinsic part of grounded theory methods (Charmaz, 2006:117-19). Cresswell (2007:217) also emphasises the presentation of a theoretical model in a figure or a diagram which I have used quite extensively.
- In the presentation of findings in the following chapter I have used a form of representation that ensures a clear distinction between the views expressed by the participants and my interpretations.
- The findings that have emerged from this study have been discussed in the light of existing literature in Chapter 6. Where possible available evidence for and against my arguments has been included. At the same time past literature has been used to explain some of the findings.

4.9 Summary of the data analysis process

The overall process employed for the analysis of data is summarised in Figure 4.1. The flow chart of the analytical process appears to indicate that many of the processes were sequential. This was not necessarily always the case. Moreover, there was considerable iteration employed in the processes shown in different boxes of the figure, i.e. I frequently needed to go back and forth until thoughts had converged. This comparing, contrasting and revisiting helped in lifting themes to a theoretical level of abstraction.

This process was used to analyse the consultation feedback as well as the data from interviews and observation of meetings. The emerging findings are presented in the following chapter.

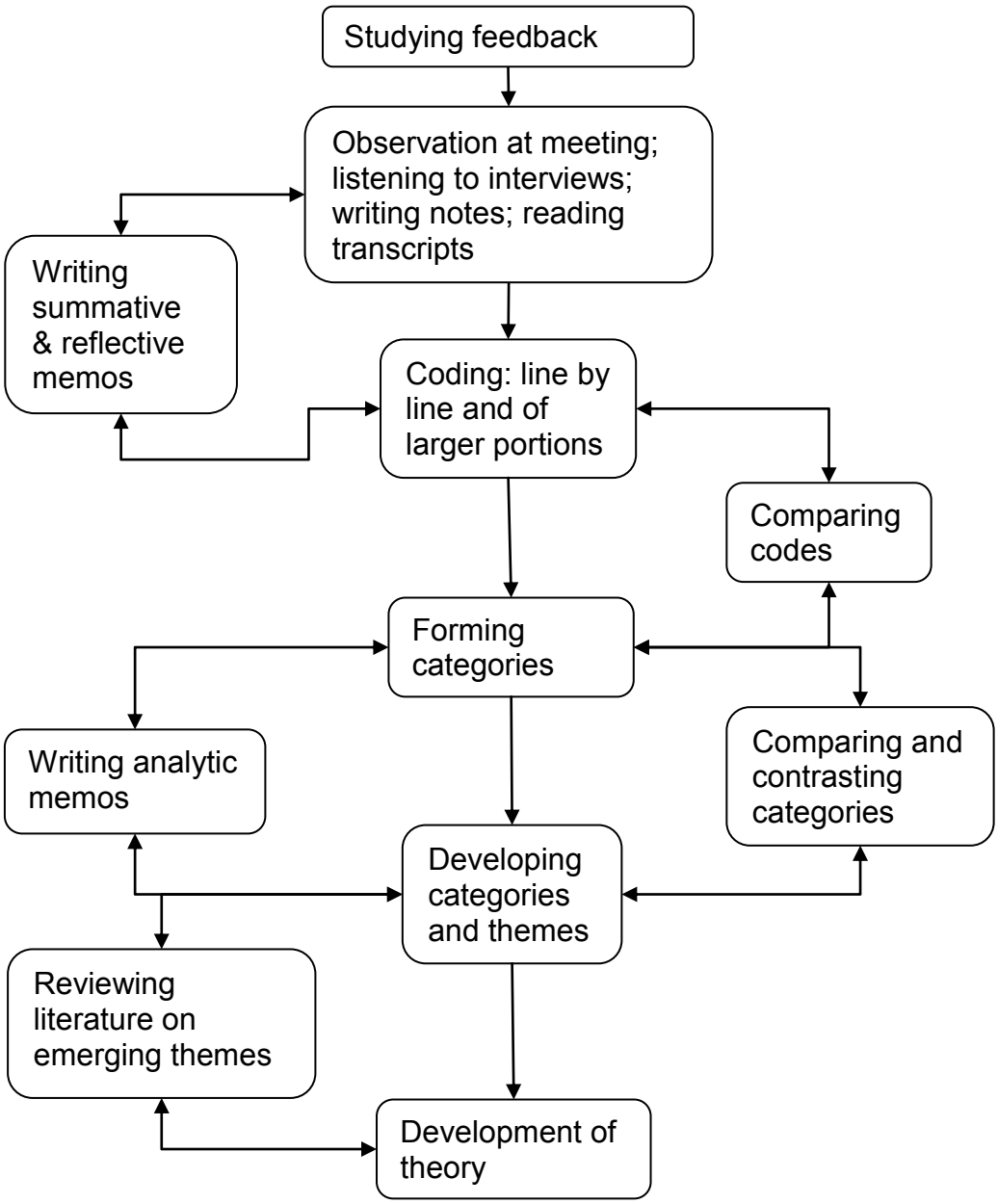

Figure 4.1: Flow chart of the analytical process

5

Research findings

5.1 Introduction

This Chapter uses the grounded theory approach to analyse the pre-formation expectations and post formation functioning of ScotPHN. Of particular interest was the knowledge mobilisation capacity of the network. In order to achieve this the data are analysed in two separate parts:

- Firstly, data from consultation feedback obtained prior to the formation of ScotPHN is considered. It is important to reiterate that this was obtained by me from a a colleague prior to this study being initiated.
- Secondly, the data obtained through interviews with people associated with ScotPHN – its steering group, project group and stakeholder group is

considered. The analysis also includes observation of ScotPHN steering group meetings.

5.2 Analysis of feedback from consultation

As was pointed out in the methodology chapter the consultation feedback was sought through direct and specific questions. The responses were all communicated electronically and were generally relatively short. The analysis found that at the highest level of conceptual abstraction were "expectations and apprehensions" associated with the formation of the network. This comprised of three main categories: perception of conditions that led to the formation of ScotPHN; expectations from ScotPHN; and perceived constraints on the network. Each of these categories was found to have sub-themes and subsidiary themes. This is illustrated in Figure 5.1 and discussed in the following sections.

5.2.1 Perception of conditions that led to the formation of ScotPHN

Feeling fragmented

The analysis of consultation feedback indicates a clear feeling of despair due to the public health workforce being fragmented. The reorganisation of the NHS with the constant emergence of new policies created considerable uncertainty. Public health practice was being devolved to Community Health Partnerships (CHPs, discussed in a previous chapter) and the reorganisation of the NHS had meant that the workforce was being shifted to CHPs creating considerable confusion and worry.

> There were fears that there will indeed be a need for such a network for public health in Scotland, as public health staff increasingly find themselves working with less and less colleagues locally, whilst helping to deliver health improvement within CHPs. (W17)

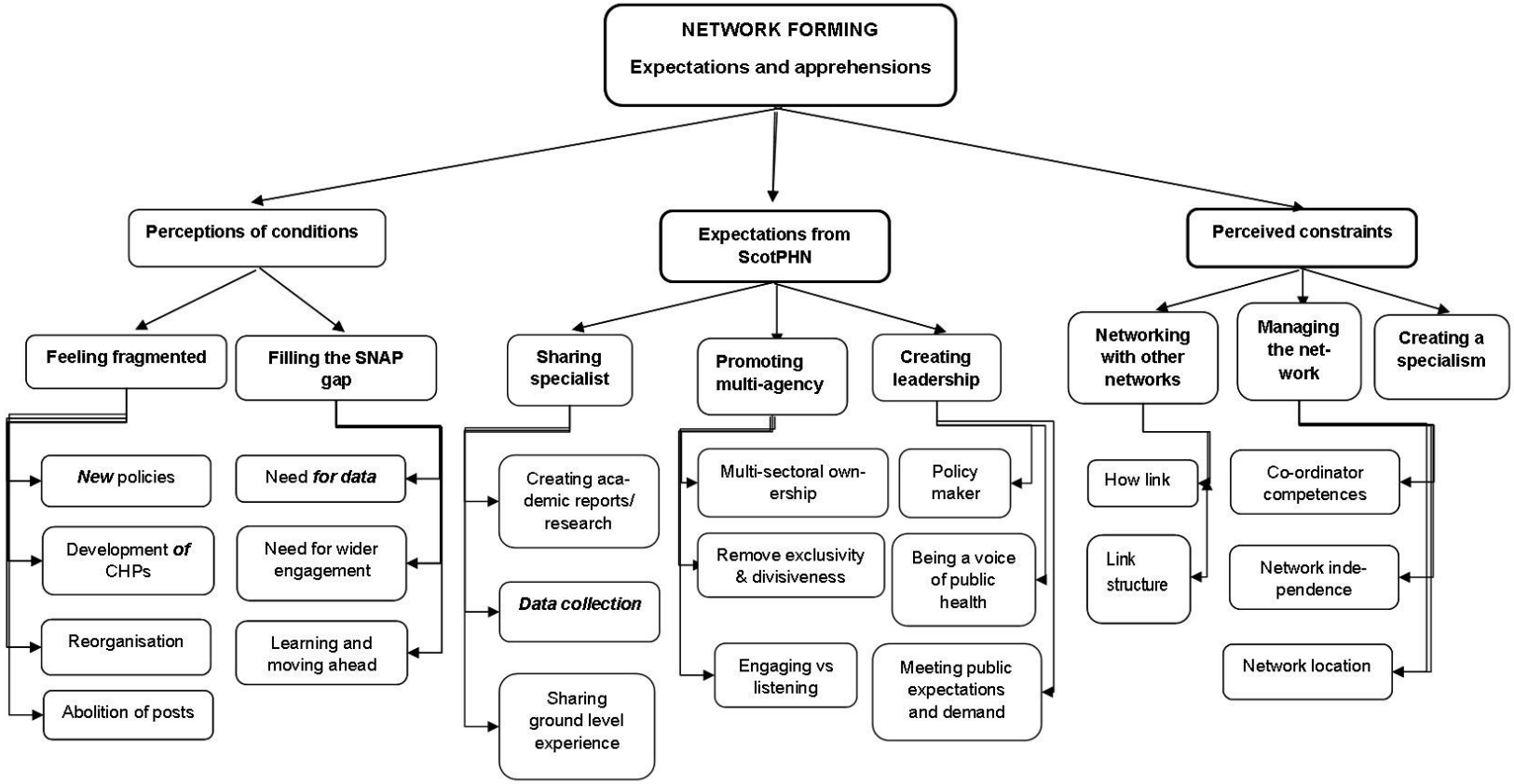

Figure 5.1: Organisation of themes, categories and sub-categories from consultation feedback data

There was hope that the network might help in providing a link with the CHP workforce to take forward the public health agenda. The consultation feedback also referred to a variety of networks that were being created in Scotland which were meant to become the organisational vehicles for public health delivery. There was a feeling that these networks had not established relationships with CHPs. The public health workforce within the CHPs would be subsumed within the new organisations' structures dominated by more clinical oriented priorities. The data showed concerns that the public health workforce being devolved to CHPs would not be able to exert influence to maintain the focus on health improvement.

> There may be critical issues concerning the implementation of CHPs and the potential impact on the priority of public health within them. (W23)

I could detect considerable concern in the responses with respect to the continuous changes and reorganisation in the public health arena. This included the merger of the Health Education Board of Scotland and the Public Health Institute for Scotland into the new NHS Health Scotland.

Public health practitioner posts were created across Scotland prior to the formation of CHPs to work as a link between primary care and the community. However, with the reorganisation of the NHS, (i.e. the formation of CHPs), and these posts being abolished, the post holders were being assigned to CHPs. While the creation of ScotPHN was welcomed there was still uncertainty as to how the network would help this workforce.

There was an element of optimism with regard to ScotPHN. There was a feeling that it will bring together the public health expertise in the changing landscape of public health

delivery in Scotland. Thus the creation of ScotPHN was viewed as a welcome development of a national movement for public health while its delivery on the ground was being seen as increasingly fragmented by the reorganisation of NHS.

Filling the SNAP gap

As discussed in Chapter 3, the development of ScotPHN was linked to the demise of the Scottish Needs Assessment programme (SNAP). The consultation feedback strongly indicated that the new network ScotPHN was required to fill the gap left by the abolition of SNAP.

> Following the demise of SNAP there had been ongoing discussions regarding the proposal for the Public Health Networks to provide a collaborative approach to public health in Scotland. The fact is that following the demise of SNAP, there has not been a framework through which key public health partners from across Scotland could easily collaborate on issues of common concern, pool collective capacity and skills, and take advantage of emerging opportunities for improving public health. (W1)

There was acknowledgement that SNAP had served a purpose but had left a gap. There was also a feeling that SNAP focused almost exclusively on the production of the reports and that the reports had no deadlines for completion.

> I think there were some very justifiable criticisms around SNAP. It was probably of its time and useful at the time but probably had outlived its usefulness. I think some of the SNAP reports took forever to produce, they weren't time limited, which is part of what Anne-Marie Wallace built into the Scottish Public Health Network, that they need to be time limited and people need… That's why they put some money in place for backfill, for people to do the work, so that the work would come out quite quickly. So that was one criticism. Eventually, it may be that there was some criticism – I don't know because I haven't seen the evaluation – but there may have been some quality issue around the SNAP report, I don't know. There may have been variable quality in what was produced. (W11)

The absence of interconnectedness of SNAP to the wider parts of the system and its exclusivity in terms of only engaging with a few, was also mentioned.

> So you could get, certainly in the later days, all you needed was half a dozen interested people who said, "We're going to do a SNAP report on… Do you mind?" (W37)

On the whole the feedback suggested that the new network should not be just a return of SNAP, which did not have a public health focus as it did not engage with non-NHS contributors to public health.

> We need to be more broadly focussed on advocacy and practical implementation, involving not just the NHS, but also all other potential contributors to the public's health, including legislators, NHS boards, local authorities, industry and the man in the street. (W23)

Some of the feedback however indicated that the gap left by SNAP was felt more by the directors of public health rather than the wider public health workforce. The implication was that since many of the needs assessment reports were led by the directors of public health the demise of SNAP had led to an erosion of their dominion.

> For the SNAP, I think they were probably identified through the Director of Public Health, at Health Board level, around a needs assessment process for specific areas of work. (W37)

While the demise of SNAP and emergence of ScotPHN were intricately linked, the expectations from the new network were not limited to filling the gap left by SNAP. These are discussed in the following section.

5.2.2 Expectations from ScotPHN

A wide range of expectations emerged from the consultation feedback. The major purpose suggested was to carry out pieces of work where there was a clear identified

need and priority by taking advantage of the skills and expertise across Scotland. It was also suggested that the network could have a coordinated function across the wider public health agenda in Scotland which could involve the development of policy. The key themes that emerged are discussed in the following sections (Figure 5.1).

Sharing specialist knowledge and expertise

Sharing of expertise and knowledge with a focus on addressing health inequalities was described as a key motivation for the creation of ScotPHN.

However, amongst whom this expertise would be shared and how it might lead to supporting the public health agenda varied, often depending on the nature of work the respondent was doing. Typically the directors of public health and public health consultants emphasised sharing of knowledge amongst public health doctors and academia to bring out academic reports that may influence policy.

> I would suggest that the capacity and expertise in national organisations local health boards and academic departments be tapped into to be commissioned to carry out work. (W24)

> The benefit of the network would be to pool resources in different health boards and bring together work which might not otherwise be shared. (W7)

> ScotPHN should have a proactive work programme to share specialist expertise across Scotland and increase efficiency. It should link in with public health specialists throughout the UK and internationally. (W9)

Another emerging expectation from the network by senior public health experts was systematically to collate, synthesise and disseminate details of effective public health interventions. It was suggested that narrowing health inequalities also requires attention to be given to matters such as vocational education, reducing reoffending, reducing child poverty, and alleviating poverty in general.

> Where public health has a role is to lead, sometimes with others, in shining a light into these areas and presenting evidence, collecting evidence where it is lacking, and devising ways out of where these people are. (W26)

> It can contribute to research and the growing evidence base for both qualitative and quantitative methodology and provide an additional impetus for the development of health impact assessment and integrated impact assessment across Scotland. (W33)

Maximising exploitation of health information; getting the most out of public health research assets; and coordinating skills and outputs that exploit health impact assessment were cited as motives for network formation. Building of evidence for influencing or developing policy also emerged from the data.

> The network should have a key role on being a voice for public health policy and a commentator on issues in Scotland. (W39)

Public health practitioners (workforce at middle management/ operational posts with nursing, occupational health, physiotherapy, epidemiological research and school teaching backgrounds), who provided public health services at the ground level felt that ScotPHN should facilitate communication amongst their colleagues.

> The main purpose of the network should be to facilitate communication and learning between colleagues in public health and help provide a powerful voice on public health issues. (W31)

In other words, for this group sharing of expertise did not imply the creation of reports but rather talking to each other to share ground level experiences. Some practitioners emphasised the need for utilising the network as a community of practice allowing for people with similar interests to share learning. It was suggested that the network should facilitate putting learning into forms that can be shared with others. To improve access to information and evidence the use of open access publication or other means was also suggested.

Promoting multiagency and multisectorial working

The importance of multisectorial partnership working was discussed in the earlier chapters, both from the viewpoint of need and from emerging policies. This also emerged from the consultation feedback data. However, the manner in which this partnership working could be taken forward varied amongst respondents particularly between those from NHS senior management and those working at the ground level within or outside the NHS. The latter group emphasised involvement and ownership of everyone involved in public health right from the beginning.

> Although the impetus for the development of the network has been promulgated through traditional NHS public health mechanisms, we consider that true ownership across the diverse public health community is Scotland requires the creation of a network which is multidisciplinary and includes representation and involvement of the local authority and the voluntary sector as equal partners. The local authority dimension in our view would incorporate environmental health, leisure services, health and safety and the health promoting schools process. (W38)

> We consider that the role of the network , at least initially would be to develop a shared understanding of the wide ranging and differing nature of the public health workforce and the contribution the differing sectors can make to tackling health inequalities and to promote an understanding of the social determinants of health. (W30)

> The current steering group is not multidisciplinary and needs to include others such as one of the 4 nurse consultants, dental and pharmacy public health, academic representation and other disciplines involved with health improvement. (W41)

There was an implication that the public health 'specialist' term is still seen to refer to public health medicine and no other professional groups such as nursing, dentistry and pharmacy. In addition to partnerships with different professional groups within the NHS voices advocating partnerships with local government and the voluntary sector also emerged.

> I would like to see more emphasis on the development of partnership with local authorities and with COSLA (although not all LA are in COSLA), which collectively have a large impact on public well-being. (W33)

Those working within the local authority environment emphasised their role in conducting health impact assessments. These, conducted by the local authorities are used for assessing the health impacts of policies, plans and projects in diverse economic sectors using quantitative, qualitative and participatory techniques. It was emphasised that this role made them essential partners in the area of public health.

In light of the Faculty of Public Health establishing a voluntary register, many also found the use of the term 'specialists' confusing and emanating exclusivity for those trained medically. (It should, however, be mentioned that this register was made open to those who were not medically trained.)

> While registered specialists will contribute to the work of the network it would be useful to include other public health /health promotion staff (e.g. Public health scientists/officers and health promotion officers etc) who may not be formally registered with the faculty. (W27)

A significantly different opinion emerged from senior NHS managers on partnership working. While acknowledging the importance of partnership working, this group felt that it would be good to discuss problems within multisectorial groups as they got "little opportunity to talk to those working in health improvement [but not from NHS] and assess their progress". ScotPHN they felt would provide a platform to discuss common problems to which they could "provide specialist input to finding potential solutions". In other words these opinions indicated a willingness to listen rather than fully engage with multisectoral partners.

A view from a public health academic was that the main purpose of the network should be to connect and coordinate the multiple disciplines of public health so that a collective view can be formed on the principal evidence based actions. This would "restore Scotland's rightful place as one of the healthiest nations in the world", it was suggested.

Creating leadership

Providing leadership to all public health activities and being a commentator on all related issues emanated as an important expectation of the proposed network.

> The main purpose of the ScotPHN should be to facilitate communication between colleagues in public health and help provide a powerful voice on public health issues in Scotland. (W39)

> The tide of public policy, followed at a distance by public awareness, is running with the public health community. We need to be leading it, and shaping it, rather than demanding to be listened to. There are now plenty of people wanting this type of service we can provide. (W28)

> ScotPHN can support on-going work as well as lobby, promote and raise the profile of the work we do and the public health agenda. (W37)

The view that the network should not undertake the operational role of policy implementation but rather feed into and lead the development of policy that can be justified by evidence, emerged strongly.

> Let me take an example- the increasing consumption of alcohol is already leading to an epidemic of cirrhosis and similar disease in Scotland. A network could bring early warning to this kind of problem and a collective view could be formed to shape new policy in Scotland. All such work should be focussed on improving the overall health status of the Scottish People. The network should stimulate and coordinate but not do the work. (W22)

There was also a feeling that the leadership should be similar to that of a market oriented organisation and based on demand. The implication was that there was significant public awareness and expectations on public health issues which needed to be met by the new network.

> I believe it should be flexible, issue based, and grouping the network to tackle and resolve problems, rather than creating groups that are more defined by disciplines than the 'market' for our services. (W35)
>
> The network should think more like a consultancy than a public service juggernaut. (W28)

On the whole the feeling was that public health had support both from government, policy and the public. The feedback made it clear that ScotPHN should lead on the public health agenda. Varying ways of providing leadership were suggested: enhancing communication amongst public health practitioners; lobbying and raising the profile of the work; stimulating and coordinating the public health activities and being problem focussed rather than discipline oriented.

5.2.3 Perceived constraints in the formation of ScotPHN

Networking with public health networks

As described in previous chapters, public health is delivered in Scotland through a wide range of networks. A view that emerged from the data suggested that these networks often worked in isolation and may have poor interconnectedness. Providing a linking platform to these varied existing networks was seen as an important role of ScotPHN.

> The network should communicate with the Scottish Public Health Observatory, including database of contact details of stakeholders; the managed knowledge network for inequalities and development of local public health networks around NHS Board areas e.g. Forth Valley Public Health Network. (W22)

It became apparent that the existing national public health initiatives, which had other networks, needed to be closely considered for ScotPHN formation. There were concerns that the network was being formed without much consideration of how it would foster links with these existing networks in public health and whether ensuring compatibility of work between networks would constrain the working of ScotPHN.

> We would like to see more linkages between Health Protection and Health Screening networks rather than formation of separate networks.
>
> How will the work NICE [National Institute for Health and Clinical Excellence] are doing on public health be used? (W40)
>
> Will Food and Physical Activity Councils and Alliances be linked to this work? (W36)
>
> How will the network link to Health Scotland and the Learning Networks? (W5)
>
> How will the network link to MCNs [Managed Clinical Networks] for Cancer, Diabetes etc? (W8)

The view was that these links should be established as early as possible. It was also suggested that these links should include networks that are outside the medical/NHS field but contribute to public health. Examples such as the Royal Environmental Health Institute of Scotland were provided in this respect. There were also considerable doubts about the efficacy of the proposed 'generic' public health network on its own without links with networks focussed on specific areas.

> Main purpose should be sharing information and expertise, avoiding duplication and collaborating on pan-Scotland issues of public health with networks focussed on key areas such as cardiovascular disease, cancer, child health, health protection. If it is going to be more than a talking shop there needs to be a mechanism for exerting influence and linking with regional planning groups as well. (W22)

Many respondents not only emphasised the importance of link with other networks but also suggested the structure in which these links could be established. The model suggested were generally hierarchical in nature wherein the ScotPHN would link with local public health networks through the associated health boards.

> One possible route would be a hub and spoke model with, for example, our PHRU [Public Health Resource Unit, Glasgow] as a spoke. This would build in learning from the ScotPHN as the hub adopting regional spokes, with a group

> of Directors of Public Health responsible for a regional public health network. (W39)
>
> In Forth Valley we are currently reviewing our local public health network. This network will have similar range of professional backgrounds and will focus on particular agendas relative to each of the three community planning partnerships and joint health improvement plans. To encourage the network model perhaps a similar range of local networks could be established in all NHS Board areas that would in turn develop a two way working relationship with the national network ScotPHN. (W35)

Interestingly, while emphasising the importance of links with other networks, there was a simultaneous feeling that the proposed overarching network might interfere with the good work being carried out by the existing networks.

> Public health does already operate very effectively within various wider networks, e.g. Oral Health and Child Health Commissioners (although not exclusively public health) and it is important that the new ScotPHN does not negatively impact on such groups /networks. (W21)
>
> ScotPHN should not consider working on topics where effective network arrangements are already in place. (W38)

Creating a specialism database

In the midst of the wide myriad of networks and people with varying public health backgrounds there was a feeling that a specialism database needed to be created to tap into the available but not apparent resources. It was suggested that the new network should build an inventory of public health expertise and a simple administrative structure to allow appropriate public health specialists in Scotland to work together irrespective of geographical and administrative boundaries.

> It would be useful to create a register or directory across Scotland of those individuals working in public health to identify capacity and areas of interest and/or experience. By agreeing to be listed in the directory, individuals would be signing up to contribute to the work of the network and acknowledging the impact that might have on existing roles (i.e. dedicated time needed to conduct a piece of work for the network and how that could be managed). (W25)

Managing the network

The management of ScotPHN was entrusted to a full time network coordinator and a part-time network lead. An emerging view from the consultation feedback data was that the network coordinator should be a skilled boundary spanner as managing a diverse agenda with varying and conflicting voices, needed strong coordination skills to deliver the work and make an impact. Complex interactions between diverse issues and people made this role challenging, it was suggested. Boundary spanners are typically defined as individuals who have the responsibility, in a multisectoral setting, to serve as a connection between different constituencies (Wenger, 1998).

At the time of consultation feedback it had also been decided that the coordinator would be based in NHS Health Scotland (HS). This move was questioned by several respondents. There was a feeling that HS was too close to the Scottish government which might compromise the coordinator's independence.

> The decision seems to already have been made to site the coordinator within Health Scotland. I would have thought that one of the key characteristics of a PHN in Scotland would be to provide an independent voice for PH policy in Scotland and should be at arms-length from Government. (W22)
>
> Health Scotland will host the network coordinator and it would be helpful to discuss how that role will complement (and/or link with) the work of the Director of Public Health Science, including recent developments such as the Scottish Public Health observatory (W5)
>
> The apparent haste to appoint a lead, and a coordinator at this stage is perplexing, considering there is such as very wide description of the purpose of the network and of the themes described in its development. (W23)

This move was supported by some respondents who felt that having the coordinator from Health Scotland would provide this ScotPHN essential insight into the working processes of the main agencies that impact health including local government. It was suggested by this group that the second choice of the organisation from which the

coordinator could emanate could be the Convention of Scottish Local Authorities (COSLA).

The move to have a part-time and fixed lead for the network was also questioned. It was felt that a part-time lead would be unable to devote the time and effort required to address the wide array of public health problems.

> Our experience in the latter years of SNAP was that increasingly people found it difficult to find the time to contribute to network activities. (W27)

There were others who felt that a true network of action should not have a pre-defined membership, a specified coordinator and a fixed lead specialist. It was suggested that the membership should be based on what needed to be done and the group could then have a single dedicated leader with defined goals.

> I don't see the point of a fixed specialist because I assume that members of a network are equal but may each be best qualified lead specialist for any one topic. (W17)

5.3 Findings from the interviews and observations

This section presents the findings which emerged from the analysis of interview and observation data using grounded theory. Six main categories emerged from the analysis of the functioning of the ScotPHN network: perceptions of what the network does; network structure; network control; collaborating with multiple sectors and agencies; mobilising public health knowledge; and the functioning of the specific HIV project group. Each of these was found to have several themes and sub-themes. The main themes are illustrated in Figure 5.2. The subsidiary themes emerging from the main themes are illustrated in Figures 5.3 to 5.8.

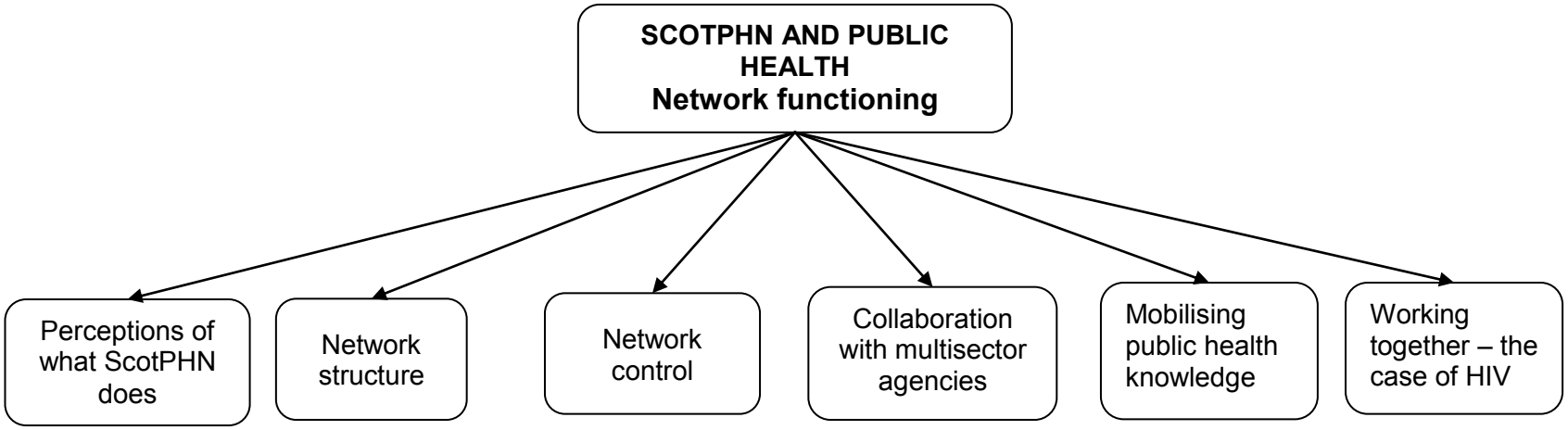

Figure 5.2: Organisation of main themes, categories and sub-categories emerging from interview and observation data

5.3.1 Perceptions of what ScotPHN does

The subsidiary themes of the perceptions of what ScotPHN does are shown in Figure 5.3 and discussed in the following sections.

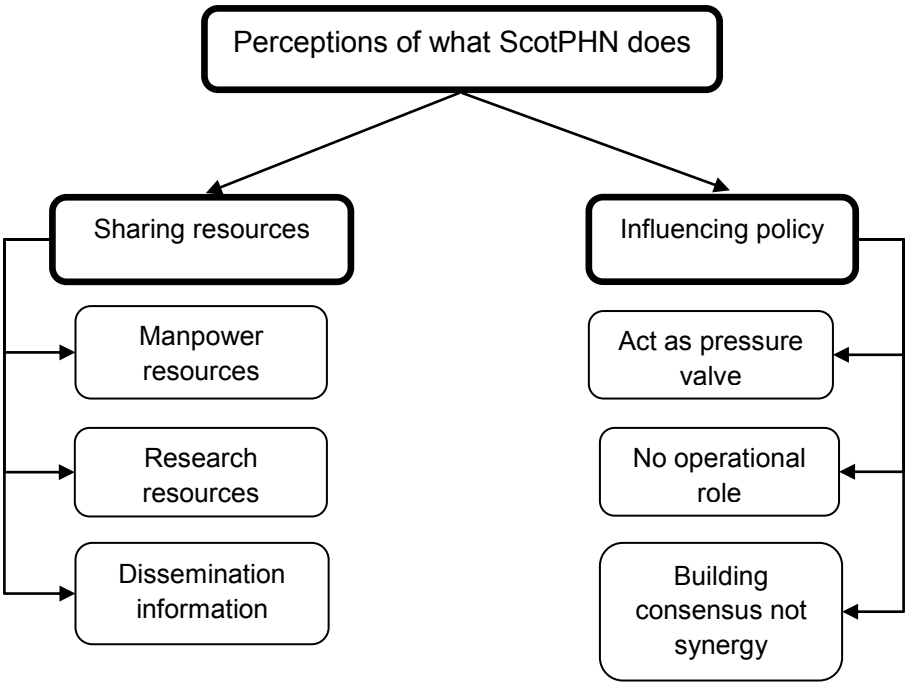

Figure 5.3: Interviews and observation – Perceptions of what ScotPHN does

Sharing resources

The perceived expectation of those involved in ScotPHN was that it should coordinate the resources of the public health function from across Scotland to deliver health services and health improvement within local health board areas. The fundamental role of the network was identified as being able to make use of those resources which exist in an effective and an efficient way. The term resource was generally used to imply

people; the network was expected to identify those with appropriate expertise and negotiate for their involvement in a particular area of interest or work.

The network, it was suggested, provided human and research resources that the health boards would not be in a position to acquire on their own. So the principle enunciated was: look at common problems and share skills, experience and expertise to produce public health material.

> So our function is not the thoughts for other people to then own, our function is to respond to what the owners want. (SG2)

There was a perception amongst some that the network made a wide variety of information available, thereby catering to a range of public health interests.

> So it's got a web site where people can get a range of different information, it sends out information by email to a range of people, it does seek the views of a range of people on interests that are within the remit of the Public Health Network. (SG1)

While the view on the one hand was, that ScotPHN was not primarily meant for the production of reports, others suggested that it had come about to fill in the gaps left by SNAP. The funding, it was suggested, was provided by the Scottish Government to enable needs assessments to be carried out on important public health topics.

> The idea there was to be able to draw on staff that was employed predominantly in health boards, whose time could be temporarily annexed and put to use on a project that would have wider national importance. And it would often involve a group of people chaired by a named person who would work together to come up with this report. But also I think, initially, it still had this notion that this was going to be available to the entire Public Health community, so there was a dual thinking going on. I think there wasn't total clarity. I think there was an attempt to satisfy everyone. Having something produced, focused bits of work, but also would work in the interests of this very wide range of people, who could potentially suggest anything. (SM1)

Influencing policy

Another emerging view was that the network was expected to act as a means to put pressure to not only negotiate for resources but also influence policy. A range of points regarding the function of ScotPHN were raised by a number of interviewees which have been taken in for further analysis. The interviewees compared ScotPHN to other public health networks in Scotland. Some suggested that ScotPHN was not expected to coordinate services in the way a managed clinical network might do, e.g. it was not expected to ensure that people in different parts of the country can get better, more equitable access to services. Another emerging impression was that ScotPHN was not a vehicle for networking amongst individuals with similar interests for which several Health Scotland networks already existed.

> They're a way of networking, professionally networking, people with similar interests or similar expertise, but it's not for any other purpose than the network existing and we can call on their advice and guidance when we need it. Whereas, ScotPHN is much more. Every member of a Public Health Department in Scotland is a member of ScotPHN whether they realise it or not. (SM2)

The data showed that the feeling was that ScotPHN was meant to develop a consensus rather than synergy: a consensus that added value because the network was meant to work beyond traditional boundaries and at the interface of multiple organisations and organisations that had a stake in the delivery of public health propirities.

5.3.2 Network Structure

The composition of ScotPHN's steering group and its project and stakeholder groups was discussed in Chapter 3. The structure of its operation and membership emanated as an important theme from the interviews with a number of subsidiary themes (Figure 5.4).

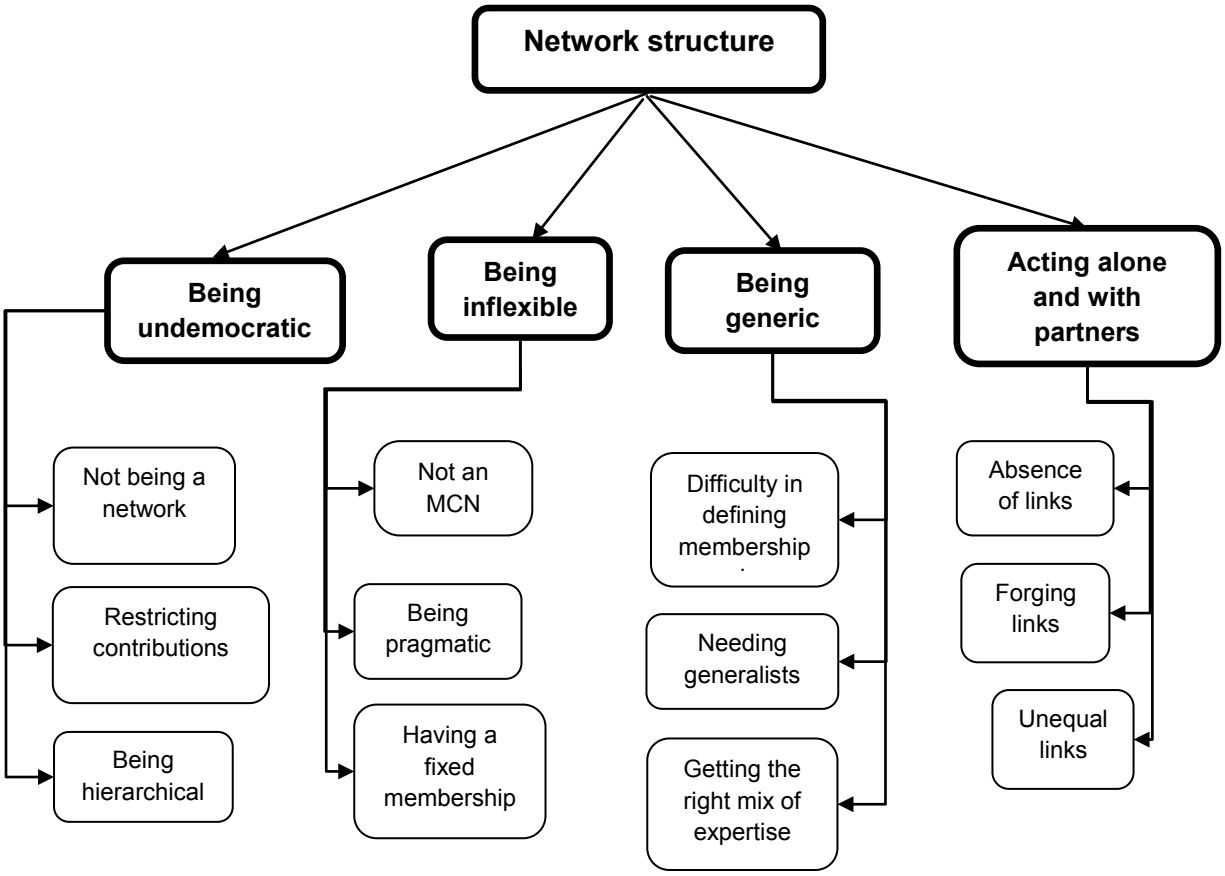

Figure 5.4: Interviews and observation – Network structure

Being undemocratic

In the context of this study the term democracy within a network setting was understood as having openness and capacity for involvement and engagement. The expectations of the stakeholders of this network were to provide favourable conditions for participation

of a variety of actors and exchange of ideas through interactions that are open and not bound by hierarchical systems. A network without these qualities would be seen as losing its democratic legitimacy (Kickert et al., 2007:174). There was general acceptance that the steering group was more like a professional body than a network. Some likened ScotPHN to a multinational company.

> We are like a big multinational large-scale company – I've worked quite closely with xxx over the years, as a xxx, where they recognise quite clearly that, on an international basis, there may well be resources that exist within different divisions in different areas that, where necessary, they call them in to work collaboratively for the good of the international organisation, rather than just doing their general job, and that seems a perfectly simple and straightforward way of doing it within a management culture that understands things like 'synergy'.(SM2)

There seemed to be a general consensus amongst the senior managers that that the word network for ScotPHN did not meet the definition of a network. Its evolving concept, role, and the way it was being governed were seen as a deviation from a democratic structure. It was seen to be distant from the perceived initial aim of being a resource available to the public health community, providing opportunity for different interest groups to make suggestions as to the kind of things the network could focus on. The structure restricted the ability of ScotPHN to draw in the expertise of a range of people from anywhere in the country to take on tasks that would serve the wider public health community.

> But I think, in the last couple of years, a somewhat tighter, more structured arrangement has developed, with the idea of the thing being hosted by Health Scotland. It's actually got a group of staff; the staff is maybe doing more of the work than originally had been determined. And there's very clear governance arrangements around how the staff themselves are supported, and then how the work programme is organised, and ultimately agreed through the Directors of Public Health, as opposed to some wider, I suppose more open, democratic arrangement that might originally have been discussed. (SG3)

The ScotPHN setup was repeatedly described as hierarchical with a project team and the stakeholder group being governed by the steering committee, which, it was suggested, was accountable to the directors of public health. There was a feeling from the middle managers that the structure of ScotPHN did not allow it to function as a group with free flow of ideas on the public health agenda i.e. mobilising knowledge, but rather had a strong steer from the directors of public health. This made it appear like a hierarchical organisational supervisor evaluating progress on ongoing pieces of work.

> At the previous steering group they were saying, "Right, how is this progressing? How are you going to approach this? What's happening next? Where are you going with looking at the protocols and the policies and the guidelines. For instance, this is going to be the Scottish Public Health Network's approach to carrying out healthcare needs assessment. So that did seem to be that kind of steering. (MM1)

Being inflexible

The initial constitution of ScotPHN was based on the principles of managed clinical networks (MCN) which permitted flexible and wider membership.

> The main attractions of the MCN concept were its flexibility and pragmatism – one can integrate the full spectrum of people's health and social care needs in an MCN. (SM5)

MCNs typically related to specific disease types and as a result their membership constituted a wide range of professionals interested in that particular disease. It was suggested that the absence of specificity had meant that the network was unable to approach the issue of developing standards of Public Health practice and its implementation across Scotland as would be expected from a managed clinical network, whose role is, "to reinforce the need for a common interpretation of national standards to ensure equity of implementation throughout services" (MEL, 1999). So, while the

network was able to commission new pieces of work, its generic nature prevented it from using the established models of practice used by MCNs.

> If you looked at an MCN, it would be setting standards, it would be preparing an annual report – the Health Protection Network does do that – so I think it's still an evolution. Of course, it's not a pure clinical network, so it does make it a bit different. (SKG3)

It was pointed out that the pragmatism associated with being able to work on different public health topics and the need to deliver timely reports had led to the structure becoming increasingly inflexible.

> So I think you maybe need to try and capture this evolution of thinking and actual practices going on, in the light of I guess assessing just how the original idea was working and how it needed to be modified to make something more practical. (VSLA1)

ScotPHN was compared with other Health Scotland networks. Health Scotland networks that were flexible and allowed for input from anyone who had anything to offer were perceived as the most successful networks. These networks changed on a regular basis as people moved in and out of the networks to acquire or deliver or access knowledge. The perspective offered was that the management of these flexible networks was difficult.

> Inflexible structure is much easier because some people like things nice, neat, tidy and orderly, and somebody managing and coordinating and leading, and sorting out the tasks and delegating. And that, in itself, is a hierarchical way of thinking. (NG)

Another feature for the success of a network related to the specific topic that the network dealt with.

> So the Arts and Health network, they have no problem in forming a network because they were a loose network in any case and they can take all the support that we offer them from the unit. (SKG2)

Being generic

The senior public health managers who were members of the steering group felt that since the ScotPHN steering group was meant to fulfil more generic public health functions, its membership could not be as flexible and the roles of the members were often not well defined. At the same time there was a general lack of clarity amongst the interviewees (from the steering, project and stakeholder groups) concerning the reasons why certain people were on the steering group.

> It is not made explicit as to why certain members are there. It's not written in the direct terms that, "You, personally, are here because…" What we have are terms of reference for the executive group that sets out what we are doing in that group. I suspect that, therefore, there is on occasions a lack of clarity as to why they are there - to govern us or are they there to help and support net contribution. I suspect that many of them understand that they are there for both functions, but they wouldn't know where a balance was and they wouldn't necessarily know what they were doing at any given point in time. And I suspect, one or two of them, if I actually presented to them in the way that we've been discussing it, would kind of open and close their mouths a bit and say, "I'm not quite sure I understand what you mean." (SG7)

Defending the generic nature of the network, some respondents pointed out that the skill mix and expertise across diverse public health functions could not be replicated in all areas and therefore required generalists rather than specialists.

> The network needs people like me, trained to be a generalist in public health, who can turn their hand to pretty much any part of general public health responsibilities, though I do have areas of expertise and experience in some parts of delivery, which are greater than others. Now, if I'm a good example, then there are bits where I can turn my hand to whatever I'm asked to turn to, and there are bits where you expect me to provide some degree of leadership, enhanced knowledge, experience, that can be brought to bear. (MM2)

It was suggested by a steering group member that ScotPHN allowed for recognition and efficient use of both generalists and specialists in its activities through its steering group, project group and stakeholder group structures.

Acting alone and with others

It was indicated by the stakeholder and project group interviewees that the structure needed to be more outward facing and constantly interacting with those who could contribute to its progress through sharing of knowledge. The absence of links of ScotPHN with other public health networks was frequently spoken about. ScotPHN did not liaise with either a wider public health membership or bodies constituted as public health networks. It was opined that ScotPHN worked as if it were a self sufficient entity hosted within Health Scotland. Once again this was established through comparison with other Health Scotland networks.

> I can understand, for example, the WISH, the sexual health network - I can understand that because I see communication from them, and I understand how they came into being, and who is involved and how they operate. So my thinking is that ScotPHN, its place within Health Scotland is like that but I don't quite get the same sense of it. (VSLA4)

Some other steering group members provided an account of how links with other networks were made or existed. In this regard, the other networks were categorised as either generic (with some resemblance to ScotPHN) or topic based. Links with the former were fostered to share information and knowledge and work collaboratively where necessary.

> The most obvious one is the Health Protection Network in Scotland, though its function is slightly different because that's about trying to create the policy and the clinical guidance around health protection issues, rather than our role, which is much more focused on delivery and support for delivery. In a similar way, we have a kind of a line into, but don't necessarily use very much, a line into SIGN [Scottish Intercollegiate Guidelines Network]. And obviously, on a case-to-case basis, we would use SIGN, we would work with SIGN, but more likely we would use their networks that have been created. (SM2)

Scottish Public Health Forum was another network mentioned that linked with ScotPHN.

> So, for example, we provide a degree of oversight to the multidisciplinary Scottish Forum for Public Health. We provide secretariat support for them. We are in negotiation with the Health Impact Assessment Network to bring that under the auspices of ScotPHN, so that they would have a base. They would be, in effect, a sub-network of the ScotPHN. And we also have a relationship with the needs assessment programme that the Community Dental and Dental Public Health Consultants across Scotland have, which was Dental SNAP. But that kind of group, again, it will function in its own way and we're simply providing an umbrella, a degree of secretariat, and help in allowing them to make better use of the value added through our association. (SG7)

The discussions thus revealed that the relationships with some of the other networks were much more of a "big brother - little brother" type, with ScotPHN being in the dominant position. It was pointed out that administrative and secretarial support came after recognising that some of the networks have aims and objectives similar to ScotPHN. The relationship was described as a route into being able to use their resources. It was indicated that many of these networks focussed on specific topics and techniques and therefore ScotPHN links were not limited to other generic networks.

5.3.3 Network control

The subsidiary themes emerging from the network control theme are illustrated in Figure 5.5 and discussed in the following sections.

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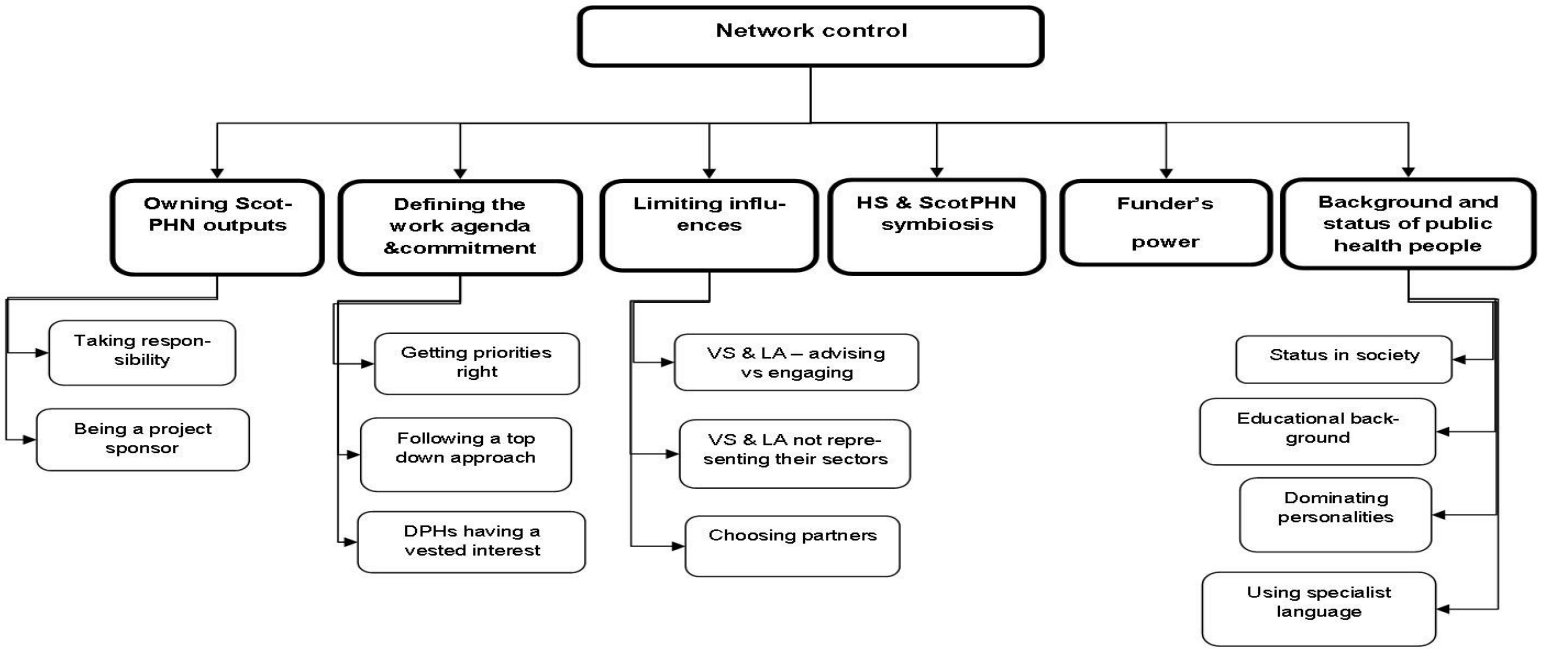

Figure 5.5: Interviews and observation – Network control

Owning ScotPHN outputs

The DPH group was required to "sign off" the work programme of ScotPHN, and each project had to have a sponsor who was a member of the DPH group, to ensure that the output was agreeable to all DPHs. Interviews made it abundantly clear that not only were all outputs generated by ScotPHN signed off by DPHs they were also seen to be "owned by" them. ScotPHN was a resource for the DPHs to have projects undertaken which they thought were important. It was further suggested that it was the DPHs who took responsibility for the knowledge outputs of the network.

> The DPHs own the process, the output and they own the network because they are the net contributors of resources to make the network function, because it's their staff, it's their people, it's their own involvement that makes the impact. (SM6)

One of the respondents provided an account of how the DPHs came to own the output. The explanation offered was that previously (in the SNAP period), it was not clear who was responsible for the outputs of the network. There were occasions when the produced reports were quite contentious with no one having responsibility for the content of these reports. It was recognised that responsibilities had to be delegated because some of the projects that the network was pursuing were high profile, important, and on potentially controversial subjects, with both political and resource implications.

> So it did seem essential to have some clear accountability, so everyone would know who was going to take responsibility for what came out of the Network. (SG3)

> So they then come to the executive group, and the proposals are then considered by the executive group, and it essentially makes a decision on what to recommend going forward with, which would then be endorsed by the

> Directors of Public Health group at one of its meetings. Because, ultimately, as has been agreed, the Directors of Public Health group has to take responsibility for the work programme of the network. (SM5)

The perceived authority of the DPHs was seen to be important for the network by many. They had "cabinet responsibility" and had to agree on and sign off the reports produced by the network.

> If the Directors of Public Health agree on this, even if an individual didn't agree with it in the meeting, publicly [overtly] they agree with it. If they sign off one of our needs assessment, that's the needs assessment they go for. That's the edge, that's the value added of the network, and that's something that we've had to work through over the last n years to create that degree of input and support to make that happen. (SM4)

Defining the work agenda and commitment

One view emanating from the steering group member interviews was that the DPHs were best placed to identify and prioritise important areas of work. It was suggested that the DPHs were professionals who had a broader overview of what is important not only from their own personal viewpoint or from the viewpoint on their respective boards, but also in terms of Scotland-wide priorities.

> Now, they may come up with any ideas, and suggestions will come into the grouping, but I think they have to have a view of is this important, is it doable, is it sensible, and also some view on prioritisation – what's the most important thing – and also there's just the whole… There are some things the network has been asked to do in the past, which were difficult things to do, not technically, but just in terms of almost political, with a small 'p', problems or issues in relation to it. And I think I remember there being one on chronic fatigue syndrome, or ME [Myalgic Encephalomyelitis], and I remember at the time thinking that's going to be a difficult one because the patient lobby there is very strong and some of them with very entrenched views and, inevitably, I think, the network draws on patient input. (SG4)

Questions were, however, raised by others on whether the DPHs always got their priorities right. It was suggested that there were pieces of work which were seen to be

extremely important by practitioners, but the DPHs had little interest, passion or involvement in these.

> I would think some of them would be questioning why on earth you would want to look at a topic like that, wouldn't necessarily see it as a priority. But, surely, even the health economics attached to £200,000 worth of lifetime HIV antiretroviral treatment would wake any DPH up to the impact, and the reason why we need to do more prevention, or the reason why we need to assess on a regular basis what kind of treatment we're offering people and how effective it is – retention and in services. (SKG3)

There was general recognition that most public health activities within ScotPHN followed a top-down approach. A bottom-up approach could happen if the DPHs as professionals in the public health area recognised that there was value in it. While some members felt that there were possibilities, albeit limited, allowing for different owners and commissioners of work, most others were of the opinion that priorities invariably emanated either from the government or from the DPHs.

> Requests for work by the Network have been coming from a number of different sources. A number of them have come from the Scottish government policy leads on things like diabetes and HIV. And I think probably, although I'm not certain, the ME/Chronic Fatigue Syndrome one also came from Scottish government. And then there are others which have come from the Directors of Public Health themselves. And others from other people within the broader public health community, who have suggested, either directly or indirectly, "We think there needs to be a bit more work done on this particular area." . (SG1)

> Then, to an extent, whilst government commissioned the Myalgic Encephalomyelitis or Chronic Fatigue Syndrome work, everybody else became side in because there isn't a bottom, there isn't a community of interest – there are a large number of communities of interest but which don't have a strong voice in any individual part of that community and, very often, they can be a community of one. And that means that almost everything was coming in from a side, it wasn't a bottom up because there wasn't a bottom to allow it to come up. (SG2)

The above discussion shows a general agreement amongst all that ScotPHN followed a top down approach. The commitment of the DPHs in terms of their own time and that of

their staff was seen to be important for the success of the network. It was also pointed out that this commitment was essential because the DPHs had a vested interest in what emerged from the reports as these would guide planning and implementation of public health interventions in their local health board areas and had financial implications.

> So the HIV needs assessment, actually, it was commissioned by government. So they were interested in having a needs assessment that would feed into the HIV action plan. So they wanted it to happen. That's brilliant. That's fine. The DsPH said, "Yes, we're prepared to use the network for doing this" but had vested interest in what it said because it impacted on their budgets and their local health boards' ways of working. (PG4)

At several different points during a meeting I observed the importance given to the response of DPHs to the activities of the network which was indicated as very important.

> Can I ask what the response has been like from DPHs? (OBS)
>
> …….that is very clearly around support for ensuring the kind of must do deliverables and local development that the DPHs requested around help and support to get messages right around obesity.
>
> So the network will lead on this but the DPHs will support and work with the network and Scottish Government in developing the dialogue. (OBS)

It was also hinted that not all directors of public health were equally powerful. The power, it was suggested, sat with the bigger NHS Boards who had the size, the resources and staff, knowledge, structures and commitment.

Limiting wider influences

During the interview discussions, while the participants agreed that the ownership and responsibility of the network outputs was with the DPHs, they were also often keen to make a point that the network itself was "owned more broadly" by the public health

community. However, the way in which this wider ownership happened in practice was left unclear.

The interview discussions made it clear that while there were representatives from the local authority and the voluntary sector on the ScotPHN steering group they had little authority, resources or power. It was suggested, for example, that the local authority representative fulfilled a contributory function to advise and guide on how the local authorities may perceive or respond to the particular issues but did not command any resources. Similar sentiments were voiced about the voluntary sector involvement. It was indicated that their role was to offer views from the voluntary sector or local government perspective that could "lead to better decisions" and help inform any work being proposed to make it more likely to be "relevant and useful". They were, it was mentioned, in a position to make proposals for future work which would be considered by the group as a whole. The local authority and voluntary sector representatives were merely expected to offer advice from their sectors rather than being fully fledged engaged members.

> The people who come from these other organisations, they're not representing them in any formal way, they are there as people who should bring with them an understanding of I suppose the perceptions and also, to some extent, the interests and current priorities of those other organisations, but they have no power in the sense that there's no mandate for them that comes directly from their sector, and there isn't actually any sense in which the organisations from which they have come have any formal decision-making power over the agenda of the network. (SM1)

Apart from the small membership of the local authority and the voluntary sector on ScotPHN the reason for their limited influence was also cited as their inability to represent their sector, unlike DPHs representatives.

> So a representative of the directors of public health has direct access to the directors of public health. A local authority person would need to say, "Well, you'd need to go off to all 32 local authorities" – has much less influence. (VSLA2)

A voluntary sector respondent (not a member of the steering group) spoke about "a blood on walls discussion" he had had with "those in power" to obtain approval for the creation of a managed clinical network (MCN) for a particular health condition. The creation of a MCN had emerged as a recommendation from a ScotPHN report.

> And, eventually there was a kind of grudging "yeah we'll go with it then", a very grudging concession to go with the idea of MCN. Then the tardiness at the central government level let it wither on the vine and allowed other powers to reassert themselves. We don't even now have the watered down version of the MCN. That to me was really about power and it wasn't about what was best for people with X [health condition] and it wasn't what was best for services in Scotland, it was about what was best for how some planners work and what was best for the way in which some clinicians work. (VSLA4)

In a steering group meeting I observed that there was some discussion on whom to include or exclude in a particular project group. While the primary criterion for this was clearly expertise the secondary criterion was to have people who were seen to be "easier to engage with".

Health Scotland and ScotPHN symbiosis

The need to have ScotPHN in the first place and its location within Health Scotland was discussed by many participants. Some respondents felt that the work done by ScotPHN could be equally well done by Health Scotland or other organisations such as Health Protection Scotland. However, the value of ScotPHN was through their links with the health boards which permits greater uptake of the end results. Without ScotPHN there was a likelihood that many of the outputs would remain an academic exercise. An exception cited was that of the likely pandemic 'bird flu' (H1N1) in which the lead was taken by Health Scotland to generate a contingency plan in case the pandemic

happened. However, Health Scotland's leadership was possible only through an agreement with Directors of Public Health, it was pointed out.

> I think actually X [Health Scotland member] has now become perhaps a more engaged stakeholder because of H1N1. We actually negotiated a mutual aid deal between the Directors of Public Health and Health Scotland so that, rather than Health Scotland being able to support central government mutual aid requirements if the pandemic had taken off, we had agreed that we would actually provide a point of contact and a focus for the Directors of Public Health to be able to call off additional staffing support from Health Scotland to either do centrally work or to support local teams, not in a way that actually meant that they were doing different things but actually they were putting their work into a position where the DPHs could call it off and that would then relieve local staff to deal with pandemic issues at local level – that was a unique agreement, the first time it had happened. (SM3)

It was clarified by the steering group members that while Health Scotland hosted ScotPHN, the latter was independent of the former. There were times when a public health crisis, such as H1N1 outbreak, helped forge an effective partnership between the network and Health Scotland and perhaps showed ways in which their relationship and sharing of knowledge and expertise could be symbiotic.

Funder's power

In addition to working for the DPHs, ScotPHN was seen to work for the Scottish Government.

> And that's really about trying to ensure a transparency so that we're not operating beyond either our expectation or that the responsibilities that are devolved to us, either by government when working on their behalf or by the DPHs from working on theirs. (SG7)

> But there are other tops, like government. And, certainly, in my time, I think there has been a much stronger recognition amongst people within government as to the usefulness of the network functioning in the way that it does, and recognising that that interplay between government and the Directors of Public Health are a very important way of trying to function. (MM3)

The power of the government emanated from the funding provided by it, which emerged as one of the key factors that made the network function.

> And it couldn't function without an executive or steering group who are able to coordinate the ideas coming in, and give shape to a work programme that is actually feasible, and then give approval to the use of resources in a way that could be seen as satisfactory from a government's point of view. So you need to have resources, the money, the staff, and the governance set up. All three are completely essential; if they weren't there, it just wouldn't work. (MM5)

In one of the steering group meetings that I attended as an observer, there was some discussion on who the primary customer for the work done by ScotPHN was: peers/stakeholders in the area of work being considered demanding early release of knowledge; or the government who funded the projects and whose approval was essential before release of any reports. The consensus that seemed to emerge was that since the work had been funded by the government they were the primary customers.

> It would be paradoxical if we published in a way that dissatisfied them [government] when they were the ones that asked for it in the first place. (OBS)

> If everybody is happy for X [ScotPHN member] to do this, I think if Y [Scottish Government representative] and X can come to an amicable agreement on this, that both looks after the interests of the network and meets the needs of the Scottish Government, and doesn't cause any unnecessary tension, then that might be a good compromise. (OBS)

Background and status of the public health professionals

Another reason as to why some members of ScotPHN had a bigger say than others was because of their perceived higher position and status in society.

> But it's interesting that you've got directors in public health, consultants in public health medicine, with respect, sitting there on £80,000 a year, and then you've got a health improvement officer on £28,000, who probably balances – having been a health improvement officer – probably balances this kind of

> health theme with a million other things that they have to do within a Local Authority. So it is quite an unequal scenario. (PG3)

Members with a medical background often set the agenda on what needs to be researched in the public health domain, thereby influencing the priorities. “When they speak everyone hears”, it was suggested.

> I think I remember in that particular meeting I made one statement and a clinician followed up and said “I completely agree with you”. I would maybe be cautious in what I was saying, because it may have been perceived as lobbying or campaigning. Probably if I had said it too strongly people would just resist it, but when it comes from a clinician that has huge power. I think it really hit people. (VSLA4)

Another respondent spoke about the dominant personalities of people from the medical profession. This dominance emerged from the hierarchical structures of healthcare units in which the consultant was ultimately accountable.

> The consultant is responsible for the clinical decision-making, particularly in something which is focused on the correct medications, and the correct treatments to use and at what point, and being up-to-date and it’s a very specialised area, which seems to take – again, that came out of the report – quite a lot of CPD time in updating. But for the number of patients that they have proportionally, to the time that you have to spend under educational pursuits to keep up-to-date, it’s disproportionate from a lot of other areas. Obviously most units have a small number of consultants and they were quite vocal and quite strong personalities. (PG1)

I was repeatedly made aware that almost all DPHs were “medically trained professionals” by the interviewees. It was also suggested that when clinicians and medically trained professionals are included in group discussions (e.g. focus groups), they tend to overshadow the discussion preventing views from those who are less vocal to emerge.

During steering group meetings that I attended, it became apparent that most discussions held on public health issues used a language that could be classed as clinical further inhibiting widespread participation. Public health was generally discussed as a

clinical issue, e.g. how screening for A could detect B. Discussion on issues such as access or accessing patient groups was scant. The discussions during steering group meetings gave an impression that their intellectual framework perhaps emerged from medical training.

5.3.4 Collaborating with multiple sectors and agencies

The data showed that analysis with respect to this theme was best conducted by dividing the respondents into three distinct groups (Figure 5.6): (a) representatives from the voluntary sector (VS) and the local authority (LA) previously identified as VSLA 1-4; (b) middle management health service practitioners who were not members of the steering group but did interact with project and stakeholder groups (identified as MM1-5); (c) senior public health managers who were members of the steering group but did not belong to VS or LA (identified as SM1-5).

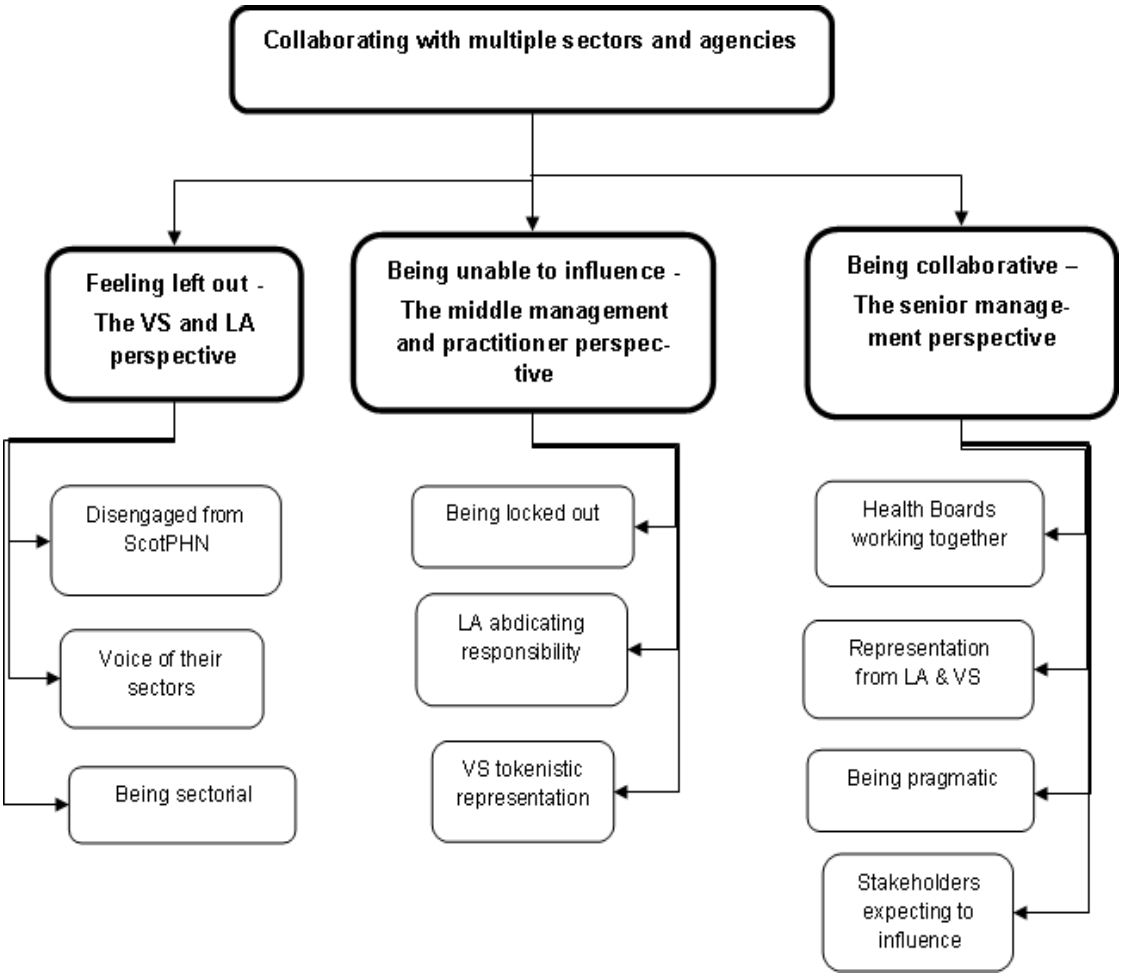

Figure 5.6: Interviews and observation – Collaborating with multiple sectors and agencies

Feeling left out – the VS and LA perspective

The VS and LA sectors felt that they were outsiders to ScotPHN. Some respondents spoke of their ignorance about ScotPHN's activities, others suggested that the presence of one voluntary sector member on the steering group gave the sector an opportunity to "learn" about ScotPHN's work.

> It is important for the voluntary sector to know what pieces of work are being taken forward and HIV is a good example, so we know that the work is being taken forward at a very strategic level with a strong research background and in which they can have a say and benefit from the findings. (VSLA1)

Memos that I wrote indicated that members from the voluntary and local authority sectors felt they were detached representatives rather than contributors to the network. It was made apparent that to be successful the network not only needed to collaborate more widely but also make their work better known.

> Critical factor for success of ScotPHN – active engagement. It also needs to publicise its work and how the CHPs [Community Health partnerships] are involved and local authorities are involved. The voluntary sector has not been used and they could certainly come to us for information. It needs to be better known as they have a very low profile and seem to get on with their work. (VSLA2)

The perception was that the involvement of the VS and LA sectors was practically absent in the deliberations of ScotPHN and their engagement was neither seen as important nor essential. The language and tone used in the network was that of public health 'medicine' and in that environment the VS and LA sectors found it difficult even to put forward an agenda item for consideration. These sectors indicated that they were not only keen to contribute but also be active users of information and research that emerged from ScotPHN.

> We participated [in the project group] because we were invited – that's one thing. And we participated because we're the national organisation which would form links to more local organisations. And we participated because we were of the view that things needed to change in the way that X [particular health condition] services are delivered in Scotland. And, again you could come up with a very quick and easy answer but, in order to provide a strong evidence base, we wouldn't just take things off the top of our head. The more research and the more information we have, the more likely it is that we'll change things in the right direction for people with X. So that's why I, as Chief Executive, and why we as Y [voluntary sector organisation], wanted to be involved, because we wanted to see a change for people with X living in Scotland. (VSLA4)

Interestingly, in spite of the apparent lack of VS and LA engagement in the steering group, the impression that emerged for me from the interviews with the HIV project group members, was that their organisations were both respected and had a large amount of credibility within ScotPHN. The VS and LA respondents pointed out that they were seen as the voice of their respective sectors as a whole, which they found challenging and onerous.

> But I think we have a certain level of credibility with those who are round the table, especially in the steering group. It was quite a responsible position because you were assumed to be speaking for the voluntary sector but there were times when, actually, my view would not have been totally consistent with the voluntary sector. So at one of the workshops, I found myself being an agent provocateur to challenging what the voluntary sector was saying – Do you really mean that? How do you know that? Why would you do that? Why do you think you're so different? (VSLA3)

Some of the respondents reflected in a dispassionate way on their capacities to contribute towards the discussions.

> At times I feel that we the voluntary sector might be making too high a claim for itself or not recognising the value of contributions that were made from elsewhere. (VSLA1)

There was a feeling that the VS and LA sectors may be creating barriers for themselves because they thought in "very sectorial terms" rather than emphasising the contributions they could make to the wider public health agenda. It was pointed out that while they may not have the professional expertise of the medical experts, they brought with them the expertise in terms of cultural and individual needs of local populations.

Being unable to influence - middle management practitioners' perspective

Discussions with public health practitioners from within the NHS who were directly or indirectly associated with the ScotPHN project groups revealed that they had little

kinship with the steering group or with the DPHs who were seen to control the network. There were frequent mentions of personal relationships with individual steering group members but an absence of formal links with ScotPHN.

> Although I know of key directors, the one that I used to work for, for instance, X in Y [health board] has a lot of personal interest and investment in looking at Z [a health condition], so I know there's support there. But there isn't a direct strategic relationship at the moment with the DPHs. (MM4)

One of the managers felt that in spite of his/her close relationship with one of the network members and sharing an office with another he/she found it difficult to influence ScotPHN or to get an item on the agenda. Another manager suggested that their links were far stronger with Health Scotland networks than with ScotPHN. It was pointed out that although SNAP, whose demise had led to the formation of ScotPHN, had had its faults it had provided avenues for collaboration and had been more receptive to external ideas. Membership of SNAP was open to all interested in contributing to the concerned needs assessment programme.

> And I think then you go to the examples of networks for Health Scotland – the sexual health, mental health, there might be a good early years one, I don't know them all at the moment. But the X [name of Health Scotland network] that we're interested in would feel more association with the Health Scotland networks than they do with the Scottish Public Health Network. And I think the difference between the SNAP – irrespective of good, bad or indifferent – and the Scottish Public Health Network was in terms of the development opportunity for the wider Public Health workforce, there were opportunities in the SNAP reports to take a lead or chair or get involved in some of that work that are not there with the Scottish Public Health Network. Not because the Scottish Public Health Network are saying we don't want you or you can't get involved, it's just because there seems to be difficulties in releasing people, or in terms of the topics that they're coming up with, or in terms of the expertise and where that lies, or in terms, indeed, of how the network is just shaping up and who is involved in it. (MM3)

The perspective of this group with respect to the involvement of local authorities for particular health conditions was extremely blunt; it was suggested that "the local authorities had demonstrated a complete lack of interest and had abdicated their responsibilities". There was a feeling that many of the larger local authorities used to have people with responsibilities and expertise with respect to some heath conditions, but such specialists did not exist anymore. It was pointed out that there were no local authority resources for some important public health issues and their understanding of some of the conditions was extremely poor.

> Listening to councillors and MSPs the other day – when there was a presentation on the GP survey – many of whom have come through the Local Authority process and have been elected members or have very strong relationships and associations with Local Authorities, kind of reiterating messages that we heard in the mid to late eighties about X [health condition] and mortality and it's a death sentence and the stigma associated with it. And having conversations with MSPs which is based on quite an old model of what X is about – treatment has completely altered that. (MM5)

It was pointed out that due to the lack of this interest and expertise it was extremely difficult to involve people from local authorities or social services in project groups. One of the interviewees suggested that one way to get the local authorities interested and have a bigger say in ScotPHN would be to have people of higher status from local authorities involved in the network.

> I think it's also about people with the authority to make decisions. DPHs do have a degree of authority and autonomy within their organisations to make decisions – officers can only suggest that. So you would want chief executives there or you would want elected members – either an elected member via COSLA or you would want the chair of the Social Work Association for Scotland, somebody at that level, directorship level, in order for it to be an equal and truly multiagency group. (MM4)

It could be speculated that the local authorities had different, perhaps traditional, priorities and foci around public health wherein sanitation (refuse collection, etc.) was

of primary concern. On the other hand these areas are not a prime concern for Health Scotland and health boards as local authorities seem to be doing these reasonably well. Generally it was felt that the local authority representative had little power within ScotPHN and had little to gain from its activities leading to apathy and disinterest.

The opinion of this group about the voluntary sector was much more positive. It was suggested that the viewpoint of this sector was important but their "tokenistic" representation on ScotPHN steering and project groups made it difficult to be voiced, though some managers felt that their voice was being heard through focus groups.

> But there was one particular charity who approached me and said that they were maybe concerned they weren't getting representation, but we did carry out two focus groups purely on the voluntary sector and ensure that there was representation in that. And the other one was in the Highland area – the voluntary sector person in Highland actually came along to the treatment and care unit focus group so they were able to input into that. The same happened in Edinburgh as well – a VS person came. They're so integrated into the unit, it was important for them to be there. So there were quite a few different routes. (MM1)

It was also pointed out that this sector was spread too thinly across Scotland to make a difference. Respondents from this group also felt that there had been little interest from members of the stakeholder group and as a consequence the stakeholder group had been becoming smaller and smaller.

> Stakeholder group was a big group initially, with representation from a wide number of stakeholders, and they didn't attend the meetings on a regular basis, and the meeting shrunk to be more or less just health representation – academics didn't anchor themselves in that process at all and you have to ask yourself the question, why not? Why did they not feel that they had any vested interest in the development of this network, given that Public Health is everybody's business? (MM3)

The general feeling was that infrequent meetings of the stakeholder group and lack of incentives for its members had led to this group becoming ineffective. There was also a feeling that a single stakeholder group could not effectively speak on all the project group topics.

Being collaborative – Perspective of senior public health managers

Terms such as collaboration, partnership, joint effort, working together and cooperation were repeatedly used by the respondents. However, these were mostly in the context of collaboration amongst health boards. It was pointed out that in Wales the range of public health functions (such as, health protection, healthcare improvement, health advisory, child protection and microbiological laboratory services and services relating to the surveillance, prevention and control of communicable diseases) had been unified as one public health service as a single organisational unit. In Scotland, however, this was not the case and health boards were required to work together.

> At its heart, the public health function in Scotland is always a collaborative venture, whether it's written with a small 'c' or a large 'C'. What we have is a series of independent public health leaders, who are given statutory responsibilities to maintain and protect and improve the health of the public within geographical areas, who are employed by relevant organisations. And those, in the Scottish context, are exclusively Health Boards, whether territorial or special health boards, working under the guidance of the Chief Medical Officer but, actually, independent because they are statutorily independent. So if Scotland needs to work together, it is always going to be through the collaborative efforts of all those who lead public health functions, whether in a territorial board or government or wherever. And, against that background, the notion of Scottish Public Health, unless somebody goes along and creates a new special health board specifically to do the type of work we do or makes it a responsibility, it will always be a collaborative venture. (SM2)

With regard to the multisectoral and multidisciplinary collaboration of ScotPHN the view of this group was that all disciplines and sectors were "represented" in the steering committee or had a voice through the stakeholder group.

> And there still is, to some extent, on the steering group, a range of interests represented. For instance, it's got people in different roles in public health, and then there's also a quasi-lay representative or at least representing the third sector on the group. (SM1)

The presence of a voluntary sector representative on the steering committee was meant to ensure that links that allow contributions to be made exist rather than this representative being expected to contribute to a specific output. There was acknowledgement that the voluntary sector had made a positive contribution to some of the outputs that had emerged from the network.

Members described the difficulty associated with the engagement with the local authorities. Pragmatic considerations did not permit involvement of all thirty two local authorities from across Scotland. Similar considerations did not allow other agencies that were closely linked to local government and were important from the public health point of view, (examples with respect to the latter provided were Scottish Environmental Protection Agency and Food Standards Agency), to contribute. The common take was that neither the local authorities nor the statutory agencies aligned to them had a corporate body or representatives that could speak on their behalf.

> So the logic is surely you would then use COSLA [Convention of Scottish Local Authorities]. But the relationship between COSLA and the local authorities is a very different type of relationship. COSLA would offer a view as COSLA, but then it would be for individual local authorities to form a view of how they did or didn't do it. (SM5)

Some members of the group expressed scathing views about the stakeholders. It was propounded that the stakeholders should focus on contributing rather than expecting. It was implied that most stakeholders expected to influence ScotPHN to further their agenda or that of the organisation they represented. It was suggested that if the stakeholders focused on contributing then their involvement would be valued and their input embedded in the processes of the network and its outputs. They would then be able to see the consequences of their contribution. It was observed that in the absence of contributions stakeholders remain invisible.

> Stakeholders rarely work out what they want of something like a network, not because they don't want to contribute but because what they actually want, is to influence, but that influence is rarely to influence the network's ability to use them, it's often to influence the network's ability to promote or support them. (SM3)

> An interesting analogy I can draw [is] to the way in which an archive works. An archivist, always comments that an archive should always be something where you are a net contributor rather than simply a net user of the archive. If you're a net contributor, the archive has a life; if you're not, the archive will at some point cease to function for things that people want. And, actually, that's a very, very good analogy for a network. (SM4)

Some of the members of this group spoke of stakeholder group feeling let down. They, however, considered that this had happened because the stakeholder group members had expected benefits which had not accrued to them.

> Or do you feel let down because somehow we've not taken your personal cause on board? More generally, are you let down because, actually, you haven't contributed? And therefore we can't really support them. (SM3)

It was also clarified that the stakeholder group members were chosen by the steering group and the people chosen were there "for a variety of reasons, many of which were political". Occasions where stakeholders came forward themselves with specific contributions to offer were rare, it was suggested. There was an acknowledgement that

the stakeholder group had not been effective, the members did not feel that their time was well spent and they thought that their suggestions were not being taken on board.

In a steering group meeting that I observed, there was considerable discussion on the Self-Assessment Audit that the network was expected to undertake. In this the network was required to score itself on a scale of 0 to 4 on a range of set assessment criteria. There were a number of criteria which included collaboration and engagement of multidisciplinary and multisectoral groups from across Scotland. Some of the discussion in the steering group focussed around the meaning of the word engagement, wherein, it was pointed out that engagement perhaps meant a bit more than mere presence. It is a matter of record that the self audit report awarded "4" against "establish multidisciplinary steering group", "2" against "stakeholder engagement" and an overall "2" against "get engagement and commitment across Scotland". (www.scotphn.net/pdf/ar-2007-2008.pdf; accessed on 24th December 2012).

5.3.5 Mobilising public health knowledge

The subsidiary themes arising from this main theme are illustrated in Figure 5.7.

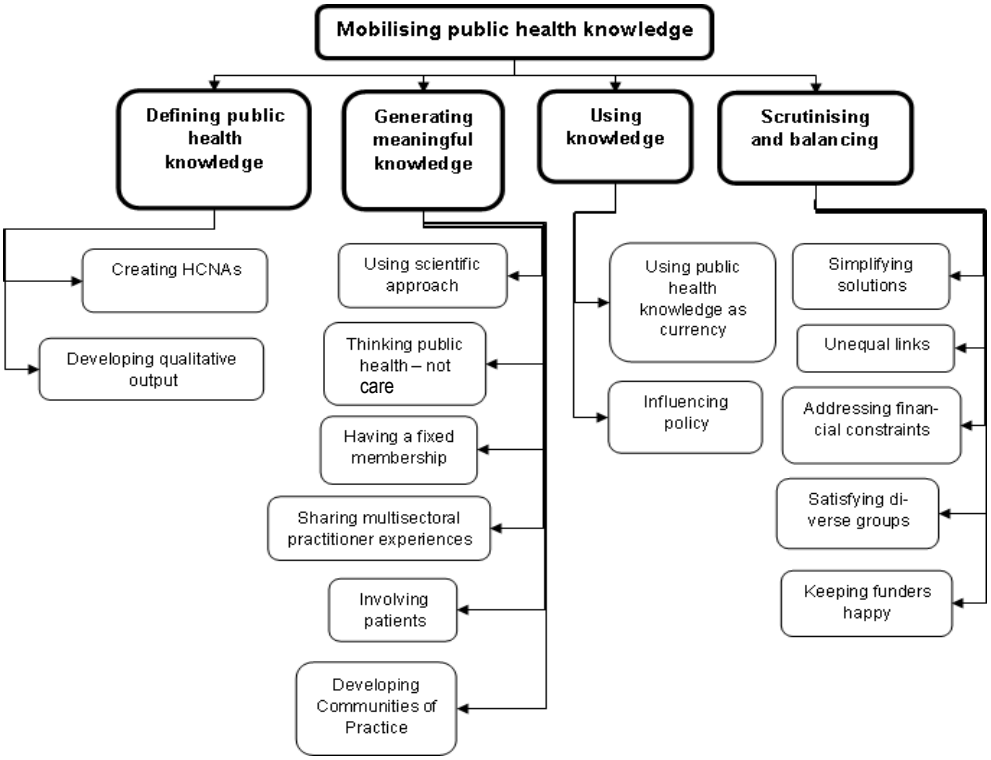

Figure 5.7: Interviews and observation – Mobilising public health knowledge

The general feeling amongst the respondents was that the topics of public health interest in Scotland were reasonably well defined. However, there was some uncertainty about the kind of knowledge required to support specific health conditions.

> Officials said [to individuals with a particular health condition], "you need to tell us what you need". The individuals responded, "you need to ask us what you need from us". (SKG1)

The interview data indicated that public health knowledge was seen to be largely synonymous to healthcare needs assessment (HCNA). There was a consensus that the evidence generated by ScotPHN was primarily qualitative in nature and other

organisations such as the Scottish Public Health Observatory (ScotPHO) and Information Statistics Division (ISD) generated numerical data.

> ScotPHO is seen as a national resource to provide evidence and data, particularly data, and particularly survey data, they tend to focus on. It's a different approach but they provide predominantly quantitative evidence, whereas I would see that the network has engaged in a more qualitative approach in terms of the evidence that it's been producing. (PG3)

Academics were often best placed to generate knowledge on Healthcare Needs Assessments as their processes were more rigorous. They were also more likely to incorporate greater qualitative information including that obtained from patients. However, academic reports could take much longer to produce. ScotPHN was a good location to carry out and oversee the production of HCNAs because they had the financial resources, links with "movers and shakers" within the government and the health boards and had access to a variety of information which was being produced by related organisations.

Generating meaningful knowledge

Participants showed unanimity that the kind of information expected from ScotPHN was best generated through high quality research. It was suggested that HCNA remained primarily a scientific output with most contributions coming from epidemiological evidence.

> I think in the consultation, maybe not within the membership of the network necessarily, but they drew upon considerable epidemiological evidence. They also involved the labs and the virologists. So I think there was a discourse with wider scientific input and perspective, but that's all still operating within what's increasingly becoming a biomedical approach to the epidemic. (SKG3)

In other words the healthcare needs assessment tended to mobilise a scientific discourse rather than a public health discourse. The voluntary sector had the most experience and insights into issues related to service patchiness and difficulties in their planning. These would not emerge if knowledge was limited to clinical understanding.

> The kind of experience that we pick up on service delivery which clinicians maybe don't always pick up and are not able to be critical (I don't mean critical in a bad way) just people reflecting their experience, maybe its easier for us to do that in that kind of context. (SKG1)

The role of the clinicians is primarily to provide care and hence they tend to treat the consequences of a disease rather than think about prevention. There was a feeling that the clinicians often do not consider how an individual or a group could have been prevented from coming to their care if some previous public health work had been undertaken. Furthermore, clinicians tended to use language which was too scientific and therefore of little use to the public health community. One respondent went so far as to say that clinicians tended to get their epidemiology askew and tended to overestimate conditions.

> If you asked a clinician, "Tell me how many patients you have with a fractured femur in a year?" usually they're right by a factor of three i.e. they estimate three times the number that they have actually seen. (SM4)

Public health knowledge has a translational role, it was noted. Clinicians who treat the disease and managers who implement programmes need to understand each other.

> To managers, you're translating sometimes what can be quite technical clinical stuff, which sometimes isn't really that technical but it's just the words and the medical terminology can be dressed up to make it be very complex, when, in fact, I think one of our roles is to actually convert that clinical language into something that's understandable and simple – and that can usually be achieved. But, to managers, I think it's also an opportunity to be explaining to clinicians the very managerial side of things, simple principles like cost-effectiveness, opportunity cost. (SM1)

The DPHs and public health consultants had medical knowledge but had a much wider understanding of public health as their role was not purely a clinical one, it was indicated. In some areas they drew upon their clinical knowledge to describe conditions but they were seen to have a much more holistic picture of health.

> DPHs recognise that, for some groups actually, clinical services are not important. In some areas, for example, prison health, it's actually issues of inequity, issues clearly of prevention. And clinicians will tend not, quite often see that. (SM4)

Healthcare knowledge, it was opined, emerged from sharing experience and perceptions. This generated confidence both amongst healthcare workers from all sectors and those receiving treatment.

> It struck me that one patient in that particular forum said "I want to be sure that my consultant is discussing my health care needs with other people and isn't just following his own ideas" and this person happened to be co-infected with X [health condition] as well and so it was a complex management issue. He didn't go into the complexities of that; it was simply about the fact that he felt he needed to be assured. That his consultant was well informed being part of a clinical network. Not just within the clinic but outside it as well. So it wasn't just the team, he was talking about phoning someone up in Dundee or Dumfries to say: "I've got this patient here, how do you think I should handle it". (PG2)

It was believed by project and stakeholder interview respondents that all public health assessments should involve the patient perspective from an early stage. This would ensure that the assessments had the right focus from the beginning.

> The interviews and responses that created the initial draft of the health care needs assessment all came from health care professionals in focus groups or individual interviews, or voluntary focus groups, rather than qualitative interview of people living with X [a health condition]. The main headings and main thrust of the assessment was already set by health care professionals. (PG3)

Any information and knowledge generated through healthcare needs assessment is closely scrutinised by a wide range of professionals and stakeholders. To ensure that this information can stand up to this scrutiny the process used to generate information needs to be robust, it was proposed. Knowledge generated through a local HCNA should be used to inform similar work being undertaken in another region or at the national level. This is often not the case, it was suggested.

ScotPHN's focus on healthcare needs assessments was criticised by some who felt that the network should also provide a platform for sharing knowledge and learning through workshops, training and CPD sessions. The North of Scotland network was mentioned as an example in this respect.

> So the North of Scotland network had been really quite well evaluated but it has changed shape quite dramatically in terms of its evolution because it really is task driven. It's come together with the five Health Boards and, as an economy of scale, they want to have teaching and learning and knowledge buried within their network. (SKG2)

It was also suggested that "loose networks" which permitted people to move in and out had a much greater potential of providing learning, exchange of knowledge, sparking new ideas and their cross fertilisation. While such networks are good for knowledge mobilisation, they do not function well when there are deadlines for generating products and their performance is not easily measured. In other words, communities of practice were seen as a possible vehicle for generating knowledge and that networks like ScotPHN cannot be regarded as communities of practice.

> And I think the problem arises when someone asks, "What is the network achieving? Where is the performance management element of what's coming out of it?" So you could say the Scottish Public Health Network has got products and those products are useful to the health system. In loose networks, it might be more difficult to understand what those key products are. And if you can live with that and think it doesn't need to be measured that tightly then

> I think you've got the potential for a great deal of exchange of knowledge, and a network which you are not controlling and managing tightly.(MM3)

Employing knowledge

It was repeatedly pointed out that public health knowledge was quite different from the knowledge that clinicians employ to treat their patients. Knowledge of the latest procedures and research has helped clinicians to remain at the top of their professions. However, the specificity of clinical knowledge makes it easier to deal with. The practitioners felt that clinicians, for example, may need to know the current way to remove an appendix or conduct hip replacement surgery. This knowledge keeps clinicians at the cutting edge of their practice. Another example provided was of European lawyers who needed knowledge to win their cases and "make bucket loads of money".

> The other area that I thought demonstrated good examples, good case studies, of networks, were clinicians – virtual networks and actual networks but mainly virtual networks. They quickly got to grips with all of the IT necessary to keep them connected, and that was mainly around cutting edge work. That was clinicians needing to know, from a point of view of professionalism and safety and low risk, what's the current issues. So that was knowledge, which was a knowledge network. (MM3)

Generation of public health knowledge and its application is neither simple nor straightforward. As a result public health professionals have been unable to use their knowledge as currency in a manner similar to the clinicians or lawyers, it was offered. For clinicians and lawyers staying at the cutting edge of their professional practice and earning potential are drivers for placing knowledge at the core of their business. Similarly strong drivers do not exist for public health, and public health knowledge does not benefit public health professionals in a similar direct manner, it was asserted.

Public health knowledge is meant to benefit populations which is often achieved by the knowledge being used to advocate and influence government policies and priorities.

> I see Scottish Public Health Network as being a source of information, knowledge, evidence, and a bit of a lever for government to advocate for particular policies and, in turn, to help support those policies and to roll them out through the network. (PG2)

> The government might be influenced by the politics or the resources, whereas Scottish Public Health Network needs to be motivated by the evidence and what's coming to their door in other ways through their network. So I think it's a bit of a two-way process. To some extent, the support in government, but I think Scottish Public Health Network needs to have an independence to be able to challenge. For example, on alcohol pricing, the government happen to think that minimum pricing has a good, strong evidence base to it, but if government were saying there's no evidence base for the influence of pricing on health then I would say Scottish Public Health Network have to say, "You're wrong. Here is the evidence and your policy needs to change." (VSLA4)

Scrutinising and balancing output

A number of participants spoke about the complexities of researching and delivering public health. Often identifying what needs to be investigated is not apparent and prioritising issues presents even greater difficulties. The agenda can, therefore, often be influenced by politics and lobbying, it was pointed out. Even when a problem is identified for investigation, the direction research takes is subjective and prone to being shepherded by those in charge. The answers that emerge are also complex and often unexpected.

> I could have gone in and given them an answer based on my experience. I had already given X [health board region], for example, some data and some ideas around what could be done, and they could easily have just picked that and said, "Okay, we'll just follow this – it seems sensible." But, having done the needs assessment, the needs assessment came out with something which was not 100% different but quite different to what I would have said off the top of my head and from my experience. So I think what the needs assessment did was that it changed the way we saw things in a place like X. (VSLA3)

Once a preliminary assessment is completed it undergoes considerable scrutiny and adjustment. A typical process for this was shown in Chapter 3, Figure 3.6. The data suggested a range of reasons that made the modification and adjustment of output necessary. It was pointed out that complex problems often have complex solutions and require practitioners to come up with simple answers so that they can be used in practice. Reports, therefore, need to be such that the answers are not only simple and easily understood, but are also applicable to meet the needs of larger populations. In some cases where complex solutions are too patient and region specific they could be difficult to implement. On the other hand, simple generic answers may lead to the wrong priorities.

> Because government set targets and the priority is to meet the target. I think it varies from place to place, where I think local and national priorities don't always tie in, or happen to be consistent, or happen to have exactly the same timing. So, for example, the government might prioritise X [health issue], so that's a major thrust, a major public health issue, but it might not be such a big priority for some health boards. If the government is highly focused on X, it might take attention away from other local issues. For example, in a rural area, it could be mental health, or it could be alcohol abuse, or it could be the influence of transport on public health, or the issue of cervical cancer – a whole load of things that could be missed because government are focused so strongly on X. (SM5)

Answers at times need to be adjusted because of the financial resources available. For example, a major focus on prevention of a disease may come at the expense of service provision for those who are already affected by it.

> There were issues about the things that came up in the report, like the facilities and what kind of processes are in place for referrals and the lack of standards, for instance, the lack of an action plan, which in terms of the prioritisation of services, it seemed to go down big focus on prevention. Which in public health terms, you love the idea that there's a great focus on prevention, but equally, when you're saying that it can't be at the expense of services if they're not meeting the needs. So it's getting that balance that seems to be important. (PG1)

I deduced that a more common reason to modify reports appeared to be to satisfy individuals and groups, particularly those with power. In a steering group meeting that I attended, the members considered "refining" a report on the basis of comments from a particular professional group.

> The X [a professional clinical group], which I have to admit was a group I was not aware existed, they haven't been high on any of my agendas previously, took exception to some of the clinical consequences of the GP guidance document. So that has actually been subject to a further review taken forward by Y [clinical expert] on behalf of the government. But, fundamentally, what they were arguing was that the potential diagnostic route might actually leave people exposed to an absence of a Z [health condition] assessment where it was needed. So that is being refined. (OBS)

> There is a much wider range of people who have particular views and we will only solve those which are within our original remit to solve, but we will try to find helpful, appropriate language to highlight what extra work needs to be done elsewhere to make that stack up fully, and I think that has to be the kind of line we take forward at this point. (OBS)

The need to ensure that reports met with the "expectation and aspiration" of the government and fitted in with the policies was seen to be an important driver to "adjust and tweak" reports.

> There were a couple of things. One is probably a chapter that was created specifically after somebody at the Scottish Government Health Department recommended that we look at, and it may not have been something that we would have particularly focused on. We wouldn't have put a chapter together, I don't think, I probably would just have had a paragraph about it as being an issue raised. And I think that happened with two of the doctors actually (laughs), I would say were led through position power in saying you need to focus on this as well or it needs to be in some way. (PG2)

The discussions also made it apparent that outputs often needed to be modified to ensure consistency with other evidence or policy based documents already in existence.

> For us, the issue is, once we know what any changes to that guidance document is, we will actually need to go back and sense check because the steering group for the X [health condition] report was very clearly of the mind that we needed to make sure that the two were consistent and stacked appropriately. (SG7)

There were also suggestions that feedback from those who were in less powerful positions was less likely to be taken on board. A member of the stakeholder group spoke about his frustration when no changes were made to the draft of the report on the basis of his comments.

> I don't know what the scale of the consultation was and what the scale of the comments was and what they had to process. But I have to say I didn't see a huge change from the draft that I offered comments on in the final document. So I don't know what weight was given to the comments that I made. Whether they were amplified by other perspectives or whether they were eclipsed by further comments. (SKG3)

The process of scrutiny and changes to the output often delayed its dissemination, it emerged. Some respondents spoke about the need for a timely dissemination to avoid "missing the windows of opportunity". The reports did not need to be "perfect and academically wonderful" but needed to satisfy "the old 80:20 rule", it was pointed out. There was recognition that the reputation of the abolished SNAP had been damaged due to delays in the dissemination process. However, the necessity of having a sound consultation process which caused delays was seen as unavoidable. A proposal to prevent loss of reputation due to delays was to ensure all involved knew current status and reasons for delay.

> A piece of communication that says, "We're deliberately withholding this for however long in order to do X, Y, and Z." But, either way, just keeping people in the loop about why. This might head off some of the reputation issues. (OBS)

5.3.6 Working together – the case of HIV

The analysis of the perceptions of the healthcare needs assessment (HCNA) process for the specific example of the needs of people living with HIV, shed considerable light on the workings of ScotPHN, particularly the HIV project group. These have been illustrated in Figure 5.8 and are discussed in the following section.

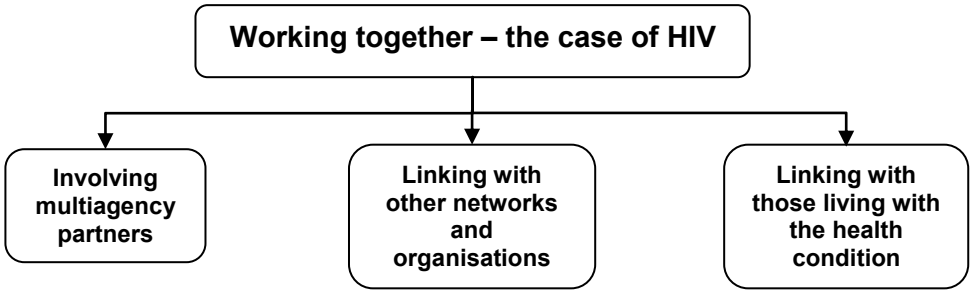

Figure 5.8: Interviews and observation – working together, the case of HIV

The project was initiated through the efforts of some physicians who approached the government with their concerns about the increasing incidence of people living with HIV.

> The process, to begin with, was a number of the HIV physicians actually approached and had a meeting with the CMO, with Harry Burns, and said, "Look, we're concerned here – our numbers are increasing. Yes, we have medication, which is working extremely well, but our numbers are getting much bigger and therefore it's much harder to meet the needs". So the CMO originally asked the Public Health Directors if they would facilitate a needs assessment. And then the Scottish Public Health Network was asked to do it. (PG1)

It was pointed out that HIV presented itself as a text book public health issue with contrasting social and clinical aspects. Though HIV was seen to have biomedical dimensions it did not conform to the biomedical model of health; it had social dimensions, social concerns and constraints.

> I'm involved in public health work, because I believe that a public health approach and a population approach have to acknowledge all of the social dimensions. (PG3)

A number of participants asserted that the project group considering the HCNA involved a range of multiagency partners which had led to "good" answers. A combination of "thorough research" combined with epidemiological and statistical information and knowledge from clinicians, front line workers, police, prison workers, and the voluntary sector was seen to contribute to the much acclaimed report.

> All got round the table and thrashed out a tricky problem. What I'm trying to say is that academic studies of that nature have a lot of value in them and that was ground breaking evidence. This wasn't so much to break new academic ground but was to use an academic process to get a good result. (VSLA4)

> Yes, he was part of the project group. He facilitated the voluntary sector but also the scrutiny panel of people living with HIV, and it was ten people that had the report after the stakeholder meeting, and had went through it in a great deal of detail and provided us with excellent feedback on it. (PG1)

> Hopefully they'll benefit from reading the report by getting a clear and up-to-date overview of the state of play with regard to HIV services, and what the different interest groups think of them. And I think, in that respect, the report has been quite successful in that there was a lot of consultation carried out in producing the report with staff and with people with HIV to find out what their views were. I think that was fairly successfully taken on board in terms of what the report then says. (SM1)

With respect to HIV the network effectively obtained a range of views on an issue which clearly had strongly varying perspectives. The group then also managed to incorporate these into a report that could be used by both government and service providers.

The respondents gave an account of how the HIV project group had linked well with other networks and organisations. It was stated that the HIV project had a good liaison with Health Scotland's WISH (Wellbeing In Sexual Health) network.

> But I also drew on some of the perspective of other people in the WISH network, which has a particular emphasis on getting evidence into practice and improving cohesion across the sexual health setting, and the needs assessment was a useful indicator from the living experience of people with HIV to remind us in the more generic sexual health field that HIV was increasing again as a concern within Scotland. (SKG3)

It also collaborated with a range of voluntary sector organisations: HIV Scotland, Waverley Care, Gay Men's Health, Body Positive Tayside, HIV-AIDS Carers & Family Service Providers, Fife Men and Positive Help. An examination of the websites of these charities reveals that they all work in HIV related issues. However, they differ significantly in terms of their region of operation, size and their specific focus. It was noted that the amounts of contributions made to the project group by these different charities were significantly different. One of the charities did not feel that there was a need for a healthcare needs assessment. Furthermore, the variation in the services provided by different charities led to a lively discussion on which service was more important than the other. A typical example was related to charities working on prevention as against those working on care.

> X [a charity] is a key example, who not only engage with prevention but also provide support services for people living with HIV. And I could see from the way that the process was described [in the HCNA report], and also from the emphasis in the findings, that they had definitely tapped into the needs of people living with HIV currently in Scotland. (PG3)

While the views of the voluntary sector organisations were obtained it was repeatedly clarified that they did not all have membership of the project group. Members of the project group were selected and some of the respondents mentioned the difficulty associated with selecting an appropriate person.

> But I do see there are barriers to that. As I said earlier, one is that there's no single advocacy group. Hopefully our organisation has some role and we do have a part to play in it. But, for us, and I think maybe for people with HIV,

> there is still a question for me about having somebody at the table. Of course I think the other question is, if you get people round the table, how do you select people to sit round the table? You select them because of expertise, knowledge, background, credibility, their links to other networks, and we select people who have their own lives and their own backgrounds and their own experience. So we all come to the table with our own experience. So it's a question that comes up a lot of the time about the representation of people with HIV. (PG2)

It was propounded that having only a small representation from the voluntary sector in the project group could be perceived as tokenism. However, the other possible option to avoid being tokenistic was not having anyone at all which was even less satisfactory, it was suggested. Although the network membership was through selections and necessarily limited they could call upon the people with expertise and knowledge as and when required.

The project group also managed to establish links with people infected with HIV. It was pointed out that some of the workers in the associated voluntary organisations were themselves infected with HIV which enabled easy access to individuals living with the condition.

> We can't always differentiate between the users and the organisation because there are people living with HIV who work in all of those services as well. It's unique in some ways because many, many people living with HIV are actually involved in the sector, across all sectors, so you can't necessarily differentiate that. (MM5)

In some cases enthusiastic and engaged social workers were said to have been instrumental in establishing contacts. The HIV project group valued its links with people living with the condition.

> And, again, that, to me, was a major turning point in my understanding and my respect for the way that ScotPHN was conducting its work because people with HIV were given equal respect with professionals, trained professionals. Not to say that people with HIV don't have expertise, they do. But that, for me, made me very comfortable to go to people with HIV and say, "We want to hear your views and your views will make a difference – and this is how it will happen."(VSLA4)

Inclusion of the views of the patients was what made the project successful, it was asserted.

> For example, one thing to look for is how healthily engaged with patients and the HIV community the project is. But it's exactly the same with diabetes. In some ways, the other things I look at are the project team and are the patients represented? Are the patients involved? In this case, there was a chair of one of the HIV charities involved. But, even that, in itself, is not perfect. But they did get another mechanism for getting information, which strengthens the report hugely. (SM4)

It was proposed by some VS and LA interviewees that the views of the patients should also be included in any subsequent development of standards that may follow the HCNA. A note of caution was struck by some respondents who suggested that while direct lived experience was important in terms of patient focus and public involvement, one could not base services merely on this perspective; there were a variety of professional dilemmas which were important to consider and answers could not emerge only from patient perspectives.

> HCNA is a very different task from the HIV Stigma Index survey, which is very much about people's direct experience of discrimination in the work place, direct experience of discrimination in terms of violence, and exclusion from services. So it's quite different to how do we make treatment and care services better in Scotland. (SKG3)

One other criticism levelled at the project group and the HCNA was that it had not provided feedback to people who had participated as to how their input had been incorporated in the report. Prevention versus care emerged as the most debated theme in the project group suggesting a level of split within the HIV service community. While some participants felt that prevention and care should not be linked, others felt that the actions related to the two needed to be well-coordinated.

> So, while those stakeholders who are involved and interested in treatment and care were very, very involved, I know that there have been other stakeholders

> who are purely focused on prevention and are not interested in treatment and care. And I think, if anything, it's amplified that there is quite a split within HIV in Scotland. Whereas, in other countries, where there's much higher prevalence, that isn't an issue because everybody has to muck in and work together and connect, and they can see a kind of spectrum of interventions, including treatment and diagnosis and prevention, that everybody should have access to. (PG3)

> The health care needs assessment was specifically about treatment and care and I was keen that it should be limited to that and shouldn't be about prevention as I think that's a separate subject – although as time went on I could see that prevention and treatment needed to be linked more closely because of the scientific evidence for that, but I felt the care aspect needed to be focussed upon. (VSLA1)

The split within HIV community on issues associated with prevention versus care, had meant that the knowledge produced through the HCNA was limited as it did not go far enough to deal with the condition in a holistic and connected way.

> I think it is less pertinent to health promotion specialists who cover HIV and sexual health. It is not seen as directly relevant to gay men's health organisations, for instance. (PG2)

Being compartmentalised in this way has meant that work required at community and social level that addresses the stigma and discrimination attached to HIV was left wanting; as were actions associated with prevention.

> There is evidence to suggest that this split was being recognised in the action plan that followed the HCNA. At the time we had begun the process of developing an HIV prevention action plan, and we used the opportunity of the needs assessment to widen the scope of that. And the principle of the new action plan is definitely to ensure that there's cohesion between prevention and treatment, recognising that diagnosis and early access to treatment does contribute to prevention. So it was fortuitous, strategically, to have that needs assessment. (MM5)

One of the conclusions of the needs assessment suggested that all treatment and care services should be part of, or affiliated to an HIV Managed Care Network. It was recommended that this network would be able to "support services to ... promote the use of shared resources, facilitate communication between services and provide the

opportunity to develop specialist skills" (Johnman, 2009:102). The disappointment of not following through the recommendations emerging through the needs assessment report was clear in the following quote.

> The key thing for me and the healthcare needs assessment is the need for the managed care and prevention networks and I still feel that we are fudging that and I still feel really disappointed. I think it will happen in different ways but don't feel happy that we are not getting what I think of as thoroughly well organised, co-ordinated, validated, managed care and prevention networks. To me the biggest thing was a real need for MCNs. (VSLA1)

It is clear from the feedback that there were missed opportunities in being able to engage with everyone. On the whole the HIV Needs Assessment project was seen to be a success primarily due to the involvement of the voluntary sector in general and passion for the subject area of a few individuals from this sector.

Although the report was formally signed off by the DPHs there was a feeling of wider ownership.

> Well, I get no sense of preciousness from ScotPHN about their ownership of the needs assessment. It feels to me that, in hearing stakeholders refer to the assessment and the process of the assessment, that there's a lot of ownership, there's quite a collective ownership of that as a piece of work**.** (PG3)

5.4 Summary

Interviews with members of the ScotPHN and observation of its steering group meetings were analysed using the grounded theory approach. The consultation feedback obtained prior to the formation of ScotPHN was also similarly analysed. Distinct main themes and subsidiary themes emerged from the analysis of these data. The consultation feedback showed that both constraints and the existing conditions contributed to the expectation of the public health community from ScotPHN. The major themes emerging from the interviews and observations of steering group meetings were related to: the network's structure; the manner in which it was controlled; its realisation of multisector collaboration; and its ability to mobilise knowledge. These themes emerging from the findings are discussed in the light of existing literature and public health policies in the following chapter.

6

Discussion and interpretation

6.1 Introduction

There is little understanding of how knowledge mobilisation in networks that comprise of multiple organisations, sectors and disciplines occurs. This study provides a very close analysis of how one such network operates in practice with an expectation that many of the findings will be applicable to other similar networks. This chapter establishes that the model of functioning that emerges from the analysis of findings does not match up with the kind of distributed disciplinary forms of functioning that are advocated in the literature for promoting knowledge mobilisation. The discussion also

reveals how established patterns of professional power and control emerge within the network.

This chapter considers, in the light of existing literature, the key themes and concepts that came forth in the study's findings. A summary of the grounded theory model that emerges from the study is then presented which shows that the manner in which the network is structured and controlled leads to limited multisectoral collaboration impairing knowledge mobilisation. The conclusions arising from the discussion are considered in the following chapter (Chapter 7) along with the wider application of the findings.

6.2 Network structure

It is apparent that the network structure of ScotPHN is strongly hierarchical with a one way flow of information and direction from the steering group to the project and stakeholder groups. This is interesting since such hierarchy is common within single organisations (Dowding, 1995); it is less so in a multiorganisational setting. As discussed in Chapter 2, Provan and Kenis (2007) classify networks on the basis of their governance into three categories: Participant-Governed networks; Lead Organisation-Governed networks; and Network Administrative Organisations. ScotPHN is clearly not a Participant-Governed network; these networks involve multiple organisations that work collectively and the participants share the governance. Although ScotPHN is hosted by Health Scotland there was little evidence to suggest that the latter provides any leadership or influences the direction of ScotPHN's work. As a consequence the ScotPHN cannot be classified as a Lead Organisation Network (with Health Scotland providing the lead). The reports emanating from ScotPHN's work are generally

recognised to be owned by the directors of public health, who are required to sign them off. The ScotPHN steering group could be construed to be under the control of the Directors of Public Health (DPH) Group. The findings suggest that the functioning and actions of ScotPHN are strongly dictated by the directors of public health from regional health boards. As such the ScotPHN could be classified as a Network Administrative Organisation with the DPH Group acting as the administrative entity. Provan and Kenis (2007) suggest that such governance reduces the tension between the need for efficient operation and inclusive decision making, but it may be viewed by participants as being bureaucratic and inconsistent with network goals of collaboration. In the context of ScotPHN this implies enhanced efficiency in report production at the cost of collaborative knowledge mobilisation.

At its inception ScotPHN was expected to develop as a Managed Clinical Network (MCN) (Wallace, 2006). A major report on MCNs (Guthrie et al., 2010:97) suggests that their purpose is "to bridge build, to forge and maintain linkages". Holmes and Langmaack (2002) describe MCNs as horizontal networks in contrast to vertical hierarchical management structures that are seen to stifle creativity. The findings show that the current structure of ScotPHN is far removed from an MCN. The consultation feedback indicates that there was considerable expectation that ScotPHN would function as an MCN. That ScotPHN is not an MCN was recognised by most interviewees, some of whom voiced their frustration at its not becoming one.

It can be argued that the MCNs have generally been created to address issues related to a particular disease or condition and create possibilities of participation and contribution from people interested in that particular area from various sectors and levels of health

practice. Whereas ScotPHN's steering and stakeholder groups have the generic remit of public health, which may not evoke the interest and appeal offered by specific diseases or conditions considered by MCNs. The members of the steering and the stakeholder groups are required to represent a wider and more generalist range of skills and expertise. Although ScotPHN's project groups are disease/condition specific (e.g. HIV, diabetes), these are constituted by the steering committee and as such have limited scope to forge linkages organically which may be needed for knowledge mobilisation. The findings show that the functioning of project groups does not resemble an MCN. It is perhaps fair to say that the initial attempt towards making ScotPHN an MCN was flawed.

The findings indicate that the public health actions perceived by ScotPHN have a strong leaning towards an intellectual framework arising from the formal study of medicine. There is considerable emphasis on epidemiological aspects and less on wider social issues. In this respect there is an element of closedness in the structure and functioning of ScotPHN. As discussed in Chapter 2, Schapp and van Twist (1997) consider closedness of different actors within a network and closedness of networks themselves. They further distinguish between social closedness (conscious or unconscious exclusion) and cognitive closedness (inability or unwillingness to perceive). In this respect ScotPHN has closedness in both the social and cognitive dimensions wherein there is a clear accepted norm that the views of the medical fraternity predominate and there is a tendency to consider views outside this sector to be less relevant, compromising the generation of multisectoral knowledge.

In view of its stable and highly restricted membership, vertical interdependence and limited horizontal articulation, ScotPHN can be classed as a policy community (Marsh and Rhodes, 1992:14). In contrast to this classification most managed MCNs, with large number of members and limited vertical interdependence, can be characterised as issue networks. In this respect, it is important to reiterate that the project groups (e.g. for the HIV project) that function under the auspices of the ScotPHN steering group focus on a specific area of interest or condition as is the case within an MCN. However, the findings reveal that the membership is restricted and that the project group members are nominated, who in turn invite people to contribute their knowledge and expertise to the project outputs. The findings show that the HIV project group was perceived to have been successful in achieving its desired outputs, i.e. development of an HCNA. This was attributed to the project group managing to select an appropriate range of passionate practitioners to contribute towards this specific subject area. The association of HIV with sexual activity in general, homosexuality in particular and stigma attached to the condition evokes strong passions which may not exist for other health conditions. Further how well a selective network functions depends on the choices made in the selection of members. Although the project report was seen in a positive light, there were some voices which indicated that the restricted nature of the project group prevented all voices, in particular those related to HIV prevention, coming to the fore. Knowledge mobilisation involves sharing knowledge and bridging the gap between research, policy and practice. Since not all of the report's findings were translated into policies and practice it can be argued that knowledge mobilisation did not occur to its fullest. This clearly was a consequence of the structure; the project group being under the control of ScotPHN steering committee and the DPH Group.

As discussed in Chapter 2, Marsh and Rhodes (1992:251) distinguish between an issue network and a policy community wherein the former has a large fluctuating membership with limited vertical interdependence. The findings show that none of the networks associated with ScotPHN – the steering, project and stakeholder groups – can be classified as issue networks. Due to their restricted membership and vertical interdependence they function as policy communities. The findings show that the inflexible structures of ScotPHN have led to some resentment at the practitioner level and in sectors outside the NHS. There is also clear evidence to suggest that some of these sectors have lost interest in the functioning of ScotPHN which clearly affects the knowledge mobilisation activity.

6.3 Network control

The findings clearly show that the network is controlled by the directors of public health within and outside the ScotPHN steering group. They are identified as owners of the ScotPHN outputs. They are seen to have "cabinet responsibilities" ensuring the network's output and defining the work agenda. The DPHs also have resources to commit the time of their staff which the findings indicate is essential for the success of the network. The findings demonstrate that the Scottish Government is viewed as a primary customer as it funds network activities.

In network theories the resources possessed by an actor in a network are often linked to his or her power (Klijn,1999:33). Peck and Dickinson (2008:91) list other sources of power which include information, expertise, credibility, stature and prestige. It is apparent that DPHs possess all the above traits. This power is exercised by the DPHs largely by defining interests, as described by Lukes (1974:23). This implies a reduced

ability of other sectors in defining the agenda and contributing to knowledge mobilisation.

The findings also indicate that a significant proportion of the power of the DPHs emanates from their stature as medical public health professionals. The UK Voluntary Register for Public Health Specialists now provides a route for people from varying educational backgrounds to become registered public health practitioners. However, when it comes to decision making it appears that public health is still dominated by those with a medical background who are seen to be "more professional". As stated in Chapter 5, almost all DPHs have medical training in their background. The findings show that the DPHs and public health consultants are viewed as professionals in the steering and project groups. Members from other sectors, on the other hand, are considered non-professional representatives.

There has been considerable discussion on what constitutes a profession and professionalism (e.g. Freidson, 1970, 1988, 1994; Etzioni, 1969; Bucher and Strauss, 1998; Annadale, 1998; Larson, 1977; Lewis, 1986; MacDonald, 1995; Evans, 2003). Medicine has been pointed out as the ideal type of a profession which most closely represents the sociological criteria of what professions do (Larson, 1977). Thus many of these discussions are based on the practice and ideology of medicine. One of the theories employed to define professionalism is the functionalist and trait theory. This theory attributes certain functional traits to the professions that are viewed as central to the maintenance and well-being of society (Hoyle, 1980; Hoyle and John, 1995; MacDonald, 1995). These studies provide a list of such traits: a unique, definite and essential social service; an emphasis on intellectual techniques in performing this

service; a long period of specialised training; a broad range of autonomy for both the individual practitioner and for the occupational group as a whole; an acceptance by the practitioner of broad personal responsibilities for judgements made and acts performed within the scope of professional autonomy; an emphasis upon the service rendered (Marshall, 1963:158-9) rather than the economic gain to practitioners; and a comprehensive self-governing organisation of practitioners. Many of these traits exist in the DPHs and the public health consultants who were found to control ScotPHN.

The question arises whether ScotPHN control exercised by DPHs arises from the professionalism emanating from their functional traits. The power theorists (Freidson, 1970, 1988) argue that it is not the traits but dominance and monopoly that are key to occupations being identified as professions. They suggest that some of the well-established professions do not possess the traits listed by the functionalist and trait theorists. For example, medicine, which has been seen as an ideal profession, is regarded by the theorists as not rigorously self-regulating, ethical or community orientated (Coburn and Willis, 2000:380). It has been further argued that many of the well-established professions were not altruistic but exploitative monopolies, driven by self-interest and increase of authority and income. Johnson (1972:34) mocks the assumptions that professionals applying their 'systematic knowledge' are imbued with community interest and that they are rewarded by society for their sustained altruism. He argued that a 'high degree of generalised and systematic knowledge' (ibid) provides a powerful control over nature and society. The findings show that the preliminary reports emanating from ScotPHN were more likely to be modified on the basis of comments from a professional group, or on the expectations from the Scottish Government. Feedback from those who were in less powerful positions was less likely

to be taken on board. This dominance of one discipline from a single sector will have a detrimental effect on knowledge mobilisation in the field of multidisciplinary, multisectoral health.

It has been established that ScotPHN follows a top-down approach led by the DPHs who have full support from the Scottish Government. However, systematic knowledge is not the only source mentioned by theorists on power, Freidson (1970, 1988) states that professions acquire power through 'organised autonomy', and by obtaining a licence and mandate to control their work by winning the support of political and social elites. With reference to the medical profession, Freidson (1988:383) argues that dominance is attained through "autonomy from the influence or power of others, and autonomy to influence or exercise power over others". Freidson (1970, 1988) suggests that physicians have been influential in defining the content of practice and training for a host of allied and highly skilled occupations, such as nurses, dentists and radiologists. The findings show that the public health 'specialist' term is still seen to refer to public health medicine and not to other professional groups such as nursing, dentistry and pharmacy. The power of a profession lies not only in the members of the professional group regarding themselves as a profession but also through the public perceiving them as such. This monopoly provided to professions is based on the monopoly of competence which is legitimised by officially sanctioned expertise and also the monopoly of credibility with the public (Larson, 1977:37-8). In summary, monopoly, dominance and power emanate from knowledge, autonomy, the support of the political elite and credibility with the public (Larson, 1977:xii). In the case of ScotPHN this appears to apply to DPHs and public health consultants. Such dominance reduces effective interaction, thereby reducing the network's ability to produce multisectoral

knowledge. Further, it reduces the democratic legitimacy of the network (Kickert et al., 1997:174,) wherein knowledge emanating from interests of under- and unrepresented parties cannot be promoted.

It has been recognised that network characteristics are affected by the number, variety and interests of the actors (Bruijn and Heuvelhof, 1997). It can be argued that the dominance of the medical viewpoint and of people who are medically trained that emerged from the findings was due to their majority of numbers and that they came with existing positions of authority and status. The relationships that exist between the actors in the network are also known to affect its characteristics (Bruijn and Heuvelhof, 1997). DPHs and senior public health professionals share a similar stature and background. As a result they become highly involved actors within the network leaving others relatively isolated. The findings also show that medically trained professionals tended to dominate the project groups (and even the focus groups held by the project groups) leading to the conclusion that although public health has been opened up to people with varied backgrounds it continues to be dominated by those who are medically trained.

6.4 Multisectoral participation

The importance of, and need for, multisectoral participation was strongly emphasised in the consultation feedback prior to the formation of ScotPHN. This need was particularly highlighted by those who were in the middle management of NHS or who were not from the NHS.

Participation of multiple sectors in public health has been necessitated by an increasing recognition that a state of wellbeing is not just absence of ill-health, prevention of disease or diagnosis and prescription, but a more holistic view "as a state of complete physical, mental and social well-being" (WHO, 1998). The WHO framework makes recommendations for European nations to take a holistic approach when planning national policies and frameworks: "Emphasis should be placed on building networks, alliances and partnerships for health at national, regional and local levels, and on empowering people to take action". Wilkinson and Marmot (2003) and Evans and Stoddart (1994) are seminal pieces of work that redefine public health and the need for health improvement strategies to focus on developing healthy environments by enabling people through partnership working and empowerment of individuals. The findings of my study reveal that ScotPHN has limited linkages with other public health networks and no direct link with community health partnerships. The engagement of the voluntary and local authority sectors is limited and their representation meagre, affecting the multisectoral knowledge mobilisation capability of the network.

There has also been international recognition of participation and involvement of patients in healthcare (Farrell et al., 2005), along with a national survey conducted on public participation by the Picker Institute (Coulter, 2006). The findings of the current

study show that there is no established strategy for patient involvement in the activities of ScotPHN. However, the HIV project group considered in this study managed to obtain the views of infected individuals. This appears to have happened because some of the workers in the associated voluntary organisations were themselves infected with HIV, permitting access.

As discussed in Chapter 2, in the past decade there have been numerous policy documents in Scotland that have emphasised the importance of 'partnership working' with a varying degree of emphasis. Some of these have been listed in Appendix A wherein messages that include aspects related to partnership have been highlighted. These show that the development of collaborative approaches that involve local authorities, the voluntary sector and the public is envisaged by many of these policies. In fact the *Partnership for Care* (Scottish Executive, 2003a) states that it is "no longer acceptable to have health improvement and promotion as a task only for directors of public health". It has been shown that ScotPHN continues to remain a DPH dominated network. The interviews conducted after the formation of ScotPHN indicate an inadequate level of multisectorial participation. The voluntary sector and the local authorities feel that they have been left out. Middle management find themselves unable to influence the functioning of ScotPHN. The senior public health managers are happy to listen to the views of people from other sectors but not willing to engage with them fully.

Arnstein (1969) considered varying levels of participation in a democratic approach and constituted a ladder that started from manipulation or complete control of those in power to citizen control at the other end as shown in Table 6.1.

Table 6.1: – Arnstein's Ladder of public participation (Arnstein, 1969)

1.	Citizen control	Degree of citizen power
2.	Delegated power	
3.	Partnership	
4.	Placation	Degree of tokenism
5.	Consultation	
6.	Informing	
7.	Therapy	Non-participation
8.	Manipulation	

Traditionally clinicians provided therapy without much effective participation of the patient. Over time informing the patient (i.e. increasing citizen participation) became a norm and thinking that encourages involvement of citizens in their own care has emerged (Scottish Executive, 2001, 2003a). With respect to ScotPHN the emphasis has been on partnerships, (third step in the Arnstein's ladder), with representative organisations that can provide knowledge in the multidisciplinary area of public health. The findings indicate that the current level of participation of multiple sectors can be classed as tokenism within the steering group, however in the project group there were some elements of genuine partnership working. The stakeholder group was found to be largely ineffective as discussed in Chapter 5 (Section 5.3.4). Peck and Dickinson (2008:5) list a range of barriers to collaboration. Ones that can be seen to be particularly relevant to this study are: fragmentation of service responsibilities across interagency boundaries (e.g. community health partnerships); inter-organisational complexity; differences in funding mechanisms; differences in ideologies and values and professional self-interest.

6.5 Knowledge mobilisation

Consultation feedback shows that prior to the formation of ScotPHN a need was being felt to fill the gap left by SNAP which was a primary vehicle for mobilising public health needs in Scotland. In addition the formation of ScotPHN was welcomed in the hope that it might find some solution to the fragmentation of the public health workforce resulting from the various shifts in policy.

Also in the consultation feedback there was a major expectation that ScotPHN would be a vehicle for sharing specialist knowledge though the meaning of knowledge varied significantly – from collation and synthesis of public health interventions to communication amongst ground level practitioners.

In the domain of public health, knowledge is considered as the capacity to inform decision making to take action, specifically for finding solutions to 'wicked' public health problems (Cooper and Levin, 2010). The above definition includes knowledge that can be implemented. The consultation feedback suggests that while such knowledge was expected to emanate from the network, ScotPHN was not expected to undertake the responsibility for its application.

Healthcare Need Assessment (HCNA) reports remain the primary knowledge output from ScotPHN. The findings show that there is a general acceptance of the topics on which HCNAs are required. Government priorities and interests of DPHs are instrumental in bringing topics to the fore. In this respect ScotPHN follows a top-down approach. The findings show some uncertainty about the kind of knowledge required to provide public health support to different kinds of health conditions. There is a feeling

that service delivery issues receive less emphasis in comparison to the mobilisation of scientific knowledge in HCNAs.

As discussed in Chapter 2, Fischer (2005) provides a valuable insight concerning the scientific and social context of knowledge. He suggests that there is a need to interconnect and integrate science with the local knowledge of affected people and communities. The social context of knowledge incorporated in the area of public health by the processes of ScotPHN appears to be limited. ScotPHN will need to battle the increasing lack of interest of the voluntary sector and local authorities to maintain a strong social contextual base to be able to capture emerging local knowledge (Fischer, 2005:68-85) in its HCNAs.

Rationalist, institutionalist and constructionist are the three categories of learning specified by Freeman (2007), as discussed in Chapter 2. The findings show that the knowledge being generated by ScotPHN can largely be classified as rationalist (e.g. evidence based practice, epidemiological principles). There is also evidence to suggest that the way ScotPHN assesses needs and the manner in which HCNAs are developed, leads to the mobilisation of institutionalist learning. It is arguable as to whether constructionist learning does happen within ScotPHN.

Social constructivism views knowledge, experience, realities and human understandings as being socially constructed through interaction among people (Lincoln and Guba, 2000). Unlike knowledge transfer, in social constructivism, the knowledge mobilisation process goes beyond discussion of research findings and potential applications between the researcher and the user (Kothari et al, 2011) to construct or transform an idea to find a solution to a problem within a particular context of practice (Freeman, 2007; Nowotny

et al., 2002). The findings reveal little evidence of social constructivism at work in knowledge mobilisation even at the project group level. It clearly does not happen at the steering group level.

While healthcare traditionally tends to use Mode 1 knowledge whose production occurs through an academic agenda and is based in academic disciplines, there is now recognition that Mode 2 knowledge is important when dealing with public health issues (Ferlie and Wood, 2003). Mode 2 knowledge is based on transdisciplinarity generated through teamwork and links amongst academics, practitioners and policy makers (Ferlie and Wood, 2003; Hessels and van Lente, 2008). The work of Gibbons et al. (1997) on the production of knowledge is particularly relevant in the context of public health. Due to its transdisciplinarity, constant interaction between practical and theoretical knowledge and the need for contextualisation, public health should be a prime example for the generation of Mode 2 type knowledge.

The findings suggest that public health as perceived within the ScotPHN steering group is predominantly based on the intellectual framework emerging from the disciplines of medicine in general and epidemiology in particular. There was little evidence to show consensus or negotiation from members belonging to other sectors as discussed in Chapter 5 (Section 5.3.4). There was recognition amongst those interviewed about the need for the participation of healthcare workers from all sectors and patients for generating knowledge. However, there was little evidence of Mode 2 knowledge mobilisation within the steering and the stakeholder groups of ScotPHN through transdisciplinary participation.

Issue networks (discussed in Chapter 2) offer an opportunity for a wide range of interests to be expressed within a network through their fluctuating membership, and as a result offer a greater possibility for Mode 2 knowledge production. Since project groups work on specific health topics they present a greater opportunity of becoming issue networks with participation from a range of people interested in the health issue or topic from different sectors and disciplines. However, the study revealed that project groups were considerably inflexible and therefore could not be classed as issue networks. As a consequence they would offer only a limited opportunity for mobilisation of Mode 2 knowledge.

ScotPHN aims to generate knowledge that can be formalised as an HCNA. Such knowledge has been classed as explicit knowledge as opposed to tacit knowledge (Nonaka and Takeuchi, 1995:62-73) which has been seen to be created through individuals' experiences and dealings with the world (Polanyi, 1966:4). The articulation of tacit knowledge leads to explicit knowledge which has been termed as externalisation (Nonaka and Takeuchi, 1995:62). In the project group considered in this study there was some evidence of externalisation due to the involvement of the voluntary sector and consequently workers who were themselves infected with HIV (Chapter 5, Section 5.3.5).

In the consultation feedback there was an expectation that ScotPHN would provide avenues for the sharing of knowledge and experience for ground level practitioners. This would have permitted tacit to tacit knowledge conversion termed as socialisation by Nonaka and Takeuchi (1995:62). The findings suggest that ScotPHN does not see such socialisation as part of its remit.

The term ‘communities of practice’ has been used to denote people who share a passion for something they do and learn how to do it better through regular interaction (Wenger, 2007). As discussed in Chapter 2, such communities have been described as having mutual engagement, being involved in a joint enterprise, having a shared repertoire and negotiating meaning in practice (Wenger, 1998:72-85). As discussed in Chapter 2 some public health networks were constituted as communities of practice. The findings indicate that ScotPHN and its associated networks are not communities of practice. Further their activities are not geared towards encouraging the formation of communities of practice for solving wicked public health problems. It can be argued that unlike clinical knowledge, public health knowledge does not always bring about readily visible impact of action, therefore it has fewer drivers for its mobilisation.

6.6 Summary of models emerging from the findings

The findings presented in the last chapter and the discussions considered in this chapter can be used to generate theoretical models on the functioning and expectations of ScotPHN before and after its formation. Figure 6.1 illustrates the model that emanates from the consultation feedback obtained prior to the formation of ScotPHN.

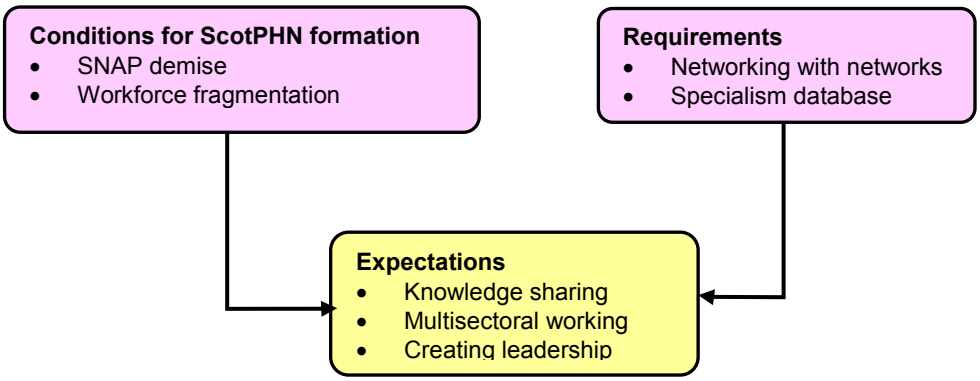

Figure 6.1: A grounded theory model of the expectations of ScotPHN prior to its formation

It can be seen that the expectations from the then proposed ScotPHN emerged from the conditions that led to its formation and the constraints that existed at that time (some of which continue to exist). The demise of the Scottish Needs Assessment Programme and the fragmentation of the public health workforce meant that ScotPHN was not only expected to provide needs assessment reports, but also to provide guidance on constantly shifting policies that impacted on the public health workforce. There was also recognition that a public health specialism database needed to be developed and strategies to enable the sharing of knowledge amongst the diverse public health networks in Scotland. Under these conditions and requirements the expectations from ScotPHN were that it would create public health leadership and enhance knowledge sharing through multisectoral working.

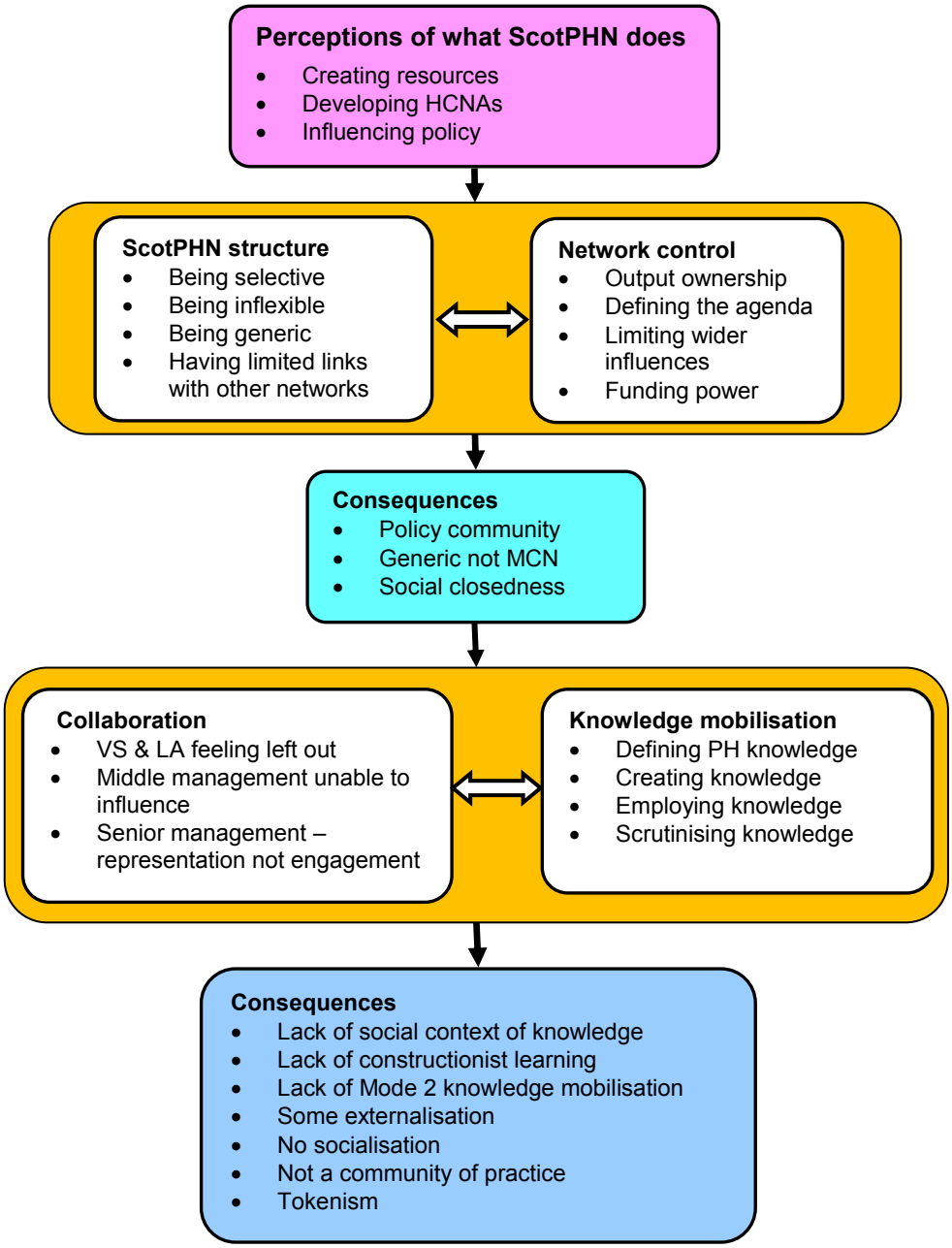

Figure 6.2: A grounded theory model of the functioning and knowledge mobilisation aspects of ScotPHN

Figure 6.2 illustrates the model associated with the functioning and knowledge mobilisation activities of ScotPHN after its formation. The perceptions of those involved with the functioning of ScotPHN are that it creates resources, develops

HCNAs for Scotland and influences policy. These activities of ScotPHN derive from a prescribed network structure and its control by those who could be classed as "professional" public health experts, with an intellectual framework emerging from medicine and epidemiology.

The network structure of ScotPHN was found to be highly selective at all levels – steering group, stakeholder group and project groups. ScotPHN was found to have limited links with other public health networks. Further the structure of the steering and stakeholder groups was meant to cater for the generic public health domain rather than specific diseases or health conditions. It can be argued that as an overseer of all public health activities the ScotPHN steering group needs to engage in a wide range of public health activities, however, this does not readily justify having a single stakeholder group as stakeholders for different diseases and conditions are likely to be different.

The network structure was intimately linked with network control. ScotPHN is primarily controlled by the directors of public health and to some extent the Scottish Executive which funds its existence. The DPHs define the agenda, own the output and to a large extent limit wider influences. Their control is exercised through power emanating from the status of the medical profession. ScotPHN's structure and the manner in which it is controlled leads to its social closedness and prevents it from functioning as an issue network or an MCN.

The tight selection of members and network control affect the knowledge mobilisation activities of the network. In the domain of public health knowledge mobilisation is strongly aligned to collaboration. The findings show that there is a feeling of being left out amongst those from the voluntary sector and local authorities and an impression of

being unable to influence the direction of ScotPHN amongst the middle level practitioners. The senior managers, on the other hand, see the token inclusion of different sectors on the steering group as an adequate representation of views.

The findings show that variable definitions have been attributed to public health knowledge. While a significant proportion of participants felt HCNAs constituted public health knowledge, there were others for whom knowledge relates to the ground level practice of public health. There is also uncertainty about how knowledge is being or should be created, particularly with regard to the role of flexible networks that could permit greater cross-fertilisation of ideas. The findings shed some light as to why greater cross fertilisation of ideas is not happening: unlike clinical knowledge the benefits of public health knowledge are not readily apparent resulting in the perception that the need for such knowledge mobilisation does not carry similar urgency.

The knowledge mobilisation strategies employed by ScotPHN, and the limited participation in its activities, result in: a lack of constructionist learning; limited inclusion of the social context of knowledge; and a deficit of Mode 2 knowledge mobilisation. In the context of knowledge conversion there is some evidence of externalisation but no socialisation. ScotPHN is not a network that can be classed as a community of practice.

The conclusions arising from the discussions are considered in the following chapter along with the wider application of the findings.

7

Conclusions

7.1 Introduction

The findings of Chapter 5 were discussed in the light of existing literature in Chapter 6 which also developed a grounded theory model of the functioning and knowledge mobilisation aspect of ScotPHN. In this chapter the understanding generated is summarised in the context of the research questions presented in Chapter 1. Although this study focussed on a single major public health network in Scotland, it is argued that its findings may potentially be fruitfully employed in the development of a wide range of networks that are being constituted; to enhance public services in general and in response to health policies in particular. This chapter also discusses the wider

application of findings emerging from this study and makes recommendations on how knowledge mobilisation can be enhanced for the effective delivery of public services. It concludes by drawing attention to the possible limitations of this study and makes recommendations for future studies in this area.

7.2 Delivery of research aims

The research questions posed in Chapter I are restated here.

a) What were the expectations for ScotPHN?

b) What is the nature of governance within this network?

c) How does the functioning of this network influence the interactions required for knowledge mobilisation?

d) What is the nature of knowledge being mobilised within the network?

The first aim of this study was to establish the expectations from ScotPHN. The findings emerging from the study (Chapter 5) and their discussion (Chapter 6) provide the expectations of the participants who responded to the consultation prior to the formation of ScotPHN. These were: sharing of knowledge; multisectoral working; and creation of leadership. The expectations of the participants appear to have been influenced by what they would have expected from the previously existing SNAP network whose primary focus was conducting Health Care Needs Assessments. The public health workforce not only expected the network to lead mobilisation of knowledge through HCNAs but also to influence policy and practice. They expected the network to make the participation of all interested easy and lead the way to multisectoral working. A greater impetus on partnership within public policy and

restructuring of public services with the formation of community health partnerships had meant fragmentation of the public health workforce across different sectors. There was a keen sense of loss within the workforce in terms of lost opportunities to share information and expertise. Due to public health being dispersed across different teams it was important for ScotPHN to provide leadership in unifying the much dispersed public health workforce.

With regard to the nature of the governance of the network, it is clear that although ScotPHN is hosted by Health Scotland there was little evidence to suggest that the latter provides any leadership or influences the direction of ScotPHN's work. The reports emanating from ScotPHN's work were generally recognised to be owned by the directors of public health, who are required to sign them off. The ScotPHN steering group could be construed to be under the control of the Directors of Public Health (DPH) Group. The findings suggest that the functioning and actions of ScotPHN are strongly dictated by the directors of public health from regional health boards. As such the ScotPHN could be classified as a Network Administrative Organisation network with the DPH Group acting as the administrative entity. Such governance enhances efficiency of operation but is inconsistent with the network goal to collaborate. In other words such governance helped ScotPHN enhance its efficiency in report production at the cost of collaborative knowledge mobilisation.

In addition, the ScotPHN was managed by the DPHs who exercised control by being highly selective as to who the network engages with, both within the steering group as well as within the project groups. The steering group control is apparent through the nature of the language used, which relied on the medical framework. Although the steering group had representation from the local authority and voluntary sector, there

was little evidence of decision making power being exercised by these representatives. While the stakeholder group was selected with membership from the wider public health workforce, there was a lack of effective engagement with them. Having a single stakeholder group for all projects implied that passion and knowledge associated with specific subject areas could not be mobilised.

Effective public health practice requires multiagency and multisectoral input with strong partnership working. In other words, strong interactions are required for public health knowledge mobilisation. The findings indicate that the public health actions within ScotPHN have a strong leaning towards an intellectual framework arising from the formal study of medicine. There is considerable emphasis on epidemiological aspects and less on wider social issues. In this respect there is an element of closedness in the structure and functioning of ScotPHN. The social context of knowledge is not a priority and the views of the medical fraternity predominate. It was found that there is a tendency to consider views outside this sector to be less relevant, compromising the generation of multisectoral knowledge. The findings reveal that the project group members are nominated by the steering group, who in turn select people to contribute their knowledge and expertise to the project outputs. This narrowness in the selection and lack of transparency on who contributes towards knowledge mobilisation appears to be self-perpetuating with the workings of the network. The inflexible structures of ScotPHN have led to some resentment at the practitioner level and in sectors outside the NHS. There is also clear evidence to suggest that some of these sectors have lost interest in the functioning of ScotPHN which clearly affects its primary function of knowledge mobilisation.

Based on the above it can be said that the nature of knowledge being mobilised is primarily Mode 1 knowledge. There is little evidence of links with other networks and cross fertilisation of ideas. Knowledge mobilisation in public health requires confluence of the scientists, the policy makers, the practitioners and the society in general. One of the characteristics of Mode 2 knowledge is that it is generated in the context of application, (i.e. knowledge needs to be contextualised). The production of HCNAs involved bureaucratic management and the reluctance of the managers to get more deeply involved with the social context. The HIV project group, however, did display some level of contextualisation largely because of the involvement of the voluntary sector which provided the social context to what was being considered. In the absence of transdiciplinarity and the dominance of a particular single sector it is unlikely that the existing tacit knowledge is becoming explicit, i.e. externalisation is limited. A conventional attitude wherein knowledge mobilisation is perceived to be the domain of experts appears to prevail.

7.3 Wider application and impact of the study

Public health provides a fertile ground for multidisciplinary and multiagency collaboration for knowledge mobilisation. The importance of multidisciplinary collaborations for the use of knowledge production is being emphasised in a wide range of scientific and social fields. It has been suggested that governments spend huge amounts of money each year to fund large-scale multidisciplinary projects to expand the frontiers of knowledge (Porac et al., 2004). For example, the recently announced €15 billion funding by the European Union (Horizon 2020) relies on partnerships amongst

organisations. Some of the priorities identified by the Christie Commission (Scottish Government, 2011) reviewing public services in Scotland were as follows:

- *Bottom-up approaches.* Effective services must be designed with and for people and communities - not delivered 'top down' for administrative convenience.
- *Maximising scarce resources*. Utilising all available resources from the public, private and third sectors, individuals, groups and communities.
- *Integrated services*. Concentrating the efforts of all services on delivering integrated services that deliver results.

Kahn and Prager (1994:12) observed that, "the myth of the solitary scientist in search of truth is a romantic notion whose continued existence serves as a major barrier to progress in bringing the collective weight of sciences to bear on the problems of human kind. And the idea that all scientific progress takes place within the boundaries of current disciplines is historically invalid and currently counter-productive".

The above brief discussion makes it apparent that bottom-up and multidisciplinary approaches are now recognised to be the key for knowledge mobilisation. While the virtues of collaborative work have been repeatedly emphasised, issues associated with the development of multidisciplinary and multisectoral networks that contribute to them achieving their desired objectives have not received much attention. This study has brought many of these issues to the fore. It highlights how policies, which have tended to use the terms partnerships, collaboration and networks interchangeably, could derive considerable guidance from studies on how networks actually function. Key issues are discussed in the following paragraphs.

Public service networks, in general, aim to mobilise knowledge which leads to informed decision making to take action. In other words, their remit incorporates assessment of needs, development of policies and practical implementation methodologies. They are expected to achieve this by utilising all available resources which include multiple disciplines and sectors.

This study shows that in order to have effective multidisciplinary and multisectoral collaborations it is important to have a network structure which is not hierarchical; ideally it should be participant governed with multiple sectors working collectively with no distinct governing entity. A network which has an appropriate range of interests adequately represented, both in terms of numbers and variety of the actors, will enhance multidisciplinary knowledge mobilisation. This representation needs to be ensured by those who are providing the resources that permit the network to function. In effect this can be achieved if the actors involved constitute an issue network, or at least resemble it more closely, than a policy community as defined by Marsh and Rhodes (1992:251). In the context of health, managed clinical networks (MCN) are perhaps closest to being issue networks. ScotPHM was originally envisaged as a MCN. However, it has been argued that issue networks or MCNs are associated with a particular topic while encompassing a range of affected interests. This study found that ScotPHN with its wide remit on public health is not likely to become an effective issue network. On the other hand its project groups which consider specific topics can be effectively constituted as issue networks. The implication is that public service networks which have a wide remit (in terms of topics) are unlikely to result in effective issue networks. However, specific topic networks arising from such a spectrum can become effective issue networks.

With respect to ScotPHN this study found that the network exhibited closedness in both its social and cognitive dimensions as defined by Schapp and van Twist (1997). For multisectoral knowledge mobilisation it is important to ensure that the network is not closed to interested parties. Functionally this can be achieved through consultation, copying reports to interested parties, and thereby involving them in decision making at least indirectly if not through full membership. A more difficult form of closedness that needs to be conquered is that of the actors themselves. With respect to ScotPHN this study found that the network actors had closedness in both the social and cognitive dimensions. This closure came about through language and discourse which was medical and thereby exclusive; inclusion was through professional status. Schapp and van Twist (1997) suggest language interventions as a possible remedy for this form of closedness. However, they do recognise that solutions to this issue are not readily available.

Network closedness is also closely linked to its control. In the case of ScotPHN there is the clear dominance of one sector, viz. the medically trained professionals, over others. In general control is exercised through numbers, resources, expertise, credibility, stature and prestige. So the extent of control by one sector over others can be reduced through inclusion of actors from multiple sectors and preventing dominance by numbers from one sector. Moreover, provision of network resources to sectors that are not perceived as "professionalised" can help shift power and control. There is a need to exercise a balancing act in this respect depending upon the situation and topic under consideration to ensure that key sectors do not lose interest in the functioning and the knowledge mobilisation activities of the network.

The key to multisectoral participation is through establishment of linkages: with other relevant networks; local authorities and other statutory bodies and the voluntary sector. This study showed that the passion and local knowledge available within the voluntary sector can be very fruitfully employed for knowledge mobilisation. In the context of health, strategies to establish linkages with patient groups and stakeholders who may appear to be at the periphery need to be developed. This study suggests that tokenistic representation of a particular sector is equivalent to non-participation.

This study found that the challenges to multisectoral working included inequitable allocation of roles, responsibilities, funding and resources. The language of communication and dominance of a sector further hinders multisectoral collaboration. This is likely to apply to all multisectoral working scenarios. A study conducted by Atkinson et al. (2002) also found that factors such as the professional background of actors, poor communication, absence of a common language, and lack of willingness to be involved impede the functioning of multisectoral networks. They also found that conflicts over funding within and between agencies; concerns about sustainability; and demand on staff time were additional barriers to different sectors working together in a network. In concurrence with Atkinson et al. (2002), the current study also found communication to be a key challenge.

This current study found that members from different sectors on the steering and project groups felt that they had distinct roles synchronous to the organisation they represented; they saw themselves representing their organisation rather than the network. The study by Atkinson et al. (2002) found a merging of roles amongst professionals working in close proximity. They also found that this was more likely in operational groupings

rather than in decision making networks (such as ScotPHN) where professionals from different agencies tend to maintain their distinct roles. It can however be argued that a successful multisectoral working environment will display some signs of role blurring. In general it can be unambiguously stated that a commitment to multisectoral working, with this being seen as an opportunity to enhance perspectives and understandings of the issues, is the key factor for a network's success.

During the formation of a network there needs to be a clear agreement about the type of knowledge that the network aims to mobilise: knowledge that can be implemented directly as it is or through policy; or knowledge that aims to develop an understanding in an area of interest. For networks with broad remits, there also needs to be a transparent process to identify areas which require knowledge mobilisation to ensure that limited resources are used where they are most needed. In the case of ScotPHN the topics investigated appear to emerge arbitrarily at the instigation of DPHs or the government which in turn was sometimes influenced by pressure groups.

As discussed in Chapter 2, public health in particular and public services in general are fertile grounds for the application of transdisciplinary knowledge, termed as Mode 2 knowledge. Knowledge mobilisation in these areas requires confluence of the scientists, the policy makers, the practitioners and the society in general. As mentioned earlier (Section 7.2), one of the characteristics of Mode 2 knowledge is that it is generated in the context of application and that knowledge needs to be contextualised. The current study showed that the management of the production of HCNAs involved bureaucratic management and the reluctance of the managers to get more deeply involved with the social context. It was in fact expected that the translation to practice would occur

through government policy. Knowledge produced in such a manner can at best be described as "weakly contextualised" (Nowotny, et al., 2002:121-130). It has been suggested (Nowotny, et al., 2002:131-142) that strong contextualisation does not have an established set of aims and objectives and does not tell researchers what they must do. It relies on communication, opportunism and interaction which can not only lead to new approaches but also to the definition of new problem areas.

In the arena of health an example of strongly contextualised knowledge mobilisation relates to the collaborative effort undertaken to tackle muscular dystrophy in France (Latour, 1998; Rabeharisoa and Callon, 2004). In this case the patients suffering from muscular dystrophy came together and initiated a process to find relevant expertise to generate new knowledge which would alleviate their condition. They did not wait for government funding or for government to declare muscular dystrophy a research priority. A French association for the treatment of muscular dystrophy was created and it raised $80 million in charity through a telethon (Latour, 1998). This led to new directions for treatment which could not have been independently thought of by the scientists alone. The patients placed their trust in Mode 1 science but through their interaction produced a contextualised Mode 2 environment (Nowotny, et al., 2002:140). The above example indicates that strong contextualisation emerges through negotiation amongst different interested parties and cannot be readily pre-planned. Such negotiation amongst multiple sectors is likely to result in the articulation of tacit knowledge which resides with them. As a consequence tacit knowledge is more likely to become explicit knowledge which has been termed as externalisation (Nonaka and Takeuchi, 1995:62).

As discussed earlier, the present research showed that the manner in which knowledge was being mobilised led to a weak contextualisation. There was no hint of contextualisation in the ScotPHN steering group. As noted in section 7.2, the elements of contextualisation in the HIV project group came about largely because of the involvement of the voluntary sector as it provided a social context to what was being considered as they were also close to the affected patients. This discussion points towards the advantages that an enhanced role for the voluntary sector can bring in the mobilisation of knowledge which needs to be contextualised for public services. It also indicates that a conventional attitude wherein knowledge mobilisation is perceived to be the domain of experts and scientists needs to be changed. The message that everyone can contribute needs to be amplified. Communities of practice, discussed in Chapter 2, offer effective ways in which knowledge mobilisation networks can function and their formation should be encouraged.

In summary, it can be stated that while there has been a great deal of discussion in policy documents on creating networks that can generate new knowledge and bring about societal benefits, (e.g. improvement in health practice), through multisectoral collaborations, there has been little research on the prerequisites for successful knowledge mobilisation. There is considerable academic literature on the management and functioning of policy networks (e.g. Marsh and Rhodes, 1992; Marsh and Smith, 2000; Rhodes, 1997; Rhodes, 2006; Helco, 1978; Guthrie et al., 2010; Kikert et al., 1999a,b; Koppenjan et al., 2006; Klijn, 1999; Kopenjan and Klijn, 2006). There have also been a number of studies attempting to understand the issues associated with knowledge mobilisation (e.g. Nonaka and Takeuchi, 1995; Nowotny et al., 2002; Gibbons et al., 1997; Freeman, 2006, 2007; Freeman and Sturdy, 2012). These two key

components – knowledge mobilisation and network functioning – have been brought together in this study, perhaps for the first time, through the study of a major influential network in Scotland. In the present day expectation that contribution from multiple sectors and organisations is essential for the generation of new knowledge, understanding the links between knowledge mobilisation and network functioning is particularly relevant.

7.3.1 Recommendations for knowledge mobilising networks

In Chapter 6 a grounded theory model (Figure 6.2) of the functioning and knowledge mobilising aspects of ScotPHN was developed. In view of the discussions presented in this chapter, the model presented in Chapter 6 can be employed to advance generalised recommendations for knowledge mobilising networks. These are summarised in Figure 7.1.

It has been established that the present day expectations are that new knowledge will be generated through multisectoral networks, maximising the scarce resources by mobilising expertise from both scientific and social areas. In order to meet these expectations attention should be given to: how the networks accommodate the complex requisites associated with multisectoral participation; their structure; and the manner in which they are controlled. The key points associated with this interaction have been discussed at length earlier (section 7.3) and are highlighted in the central box of Figure 7.1. In general a network needs to be truly multisectoral with strong linkages with other relevant networks, permitting all interested parties to contribute. In terms of structure they need to be participant governed and to ensure that functional closedness is avoided. The Communities of Practice model is likely to work well for knowledge mobilisation.

In any case the structure should be closer to an issue network than to a policy community. With respect to control the dominance of any particular sector or sectors should be avoided to ensure wider influence on the agenda and shared ownership of the generated knowledge. The key challenge in this respect is development of a common language. It is expected that the satisfaction of the above requisites will lead to the generation of transdisciplinary Mode 2 knowledge with strong contextualisation. It will also help identify problem areas that require knowledge mobilisation and lead to contructionist learning. It will enhance opportunities for tacit knowledge residing within specific sectors and groups to become explicit and thereby lead to increased externalisation.

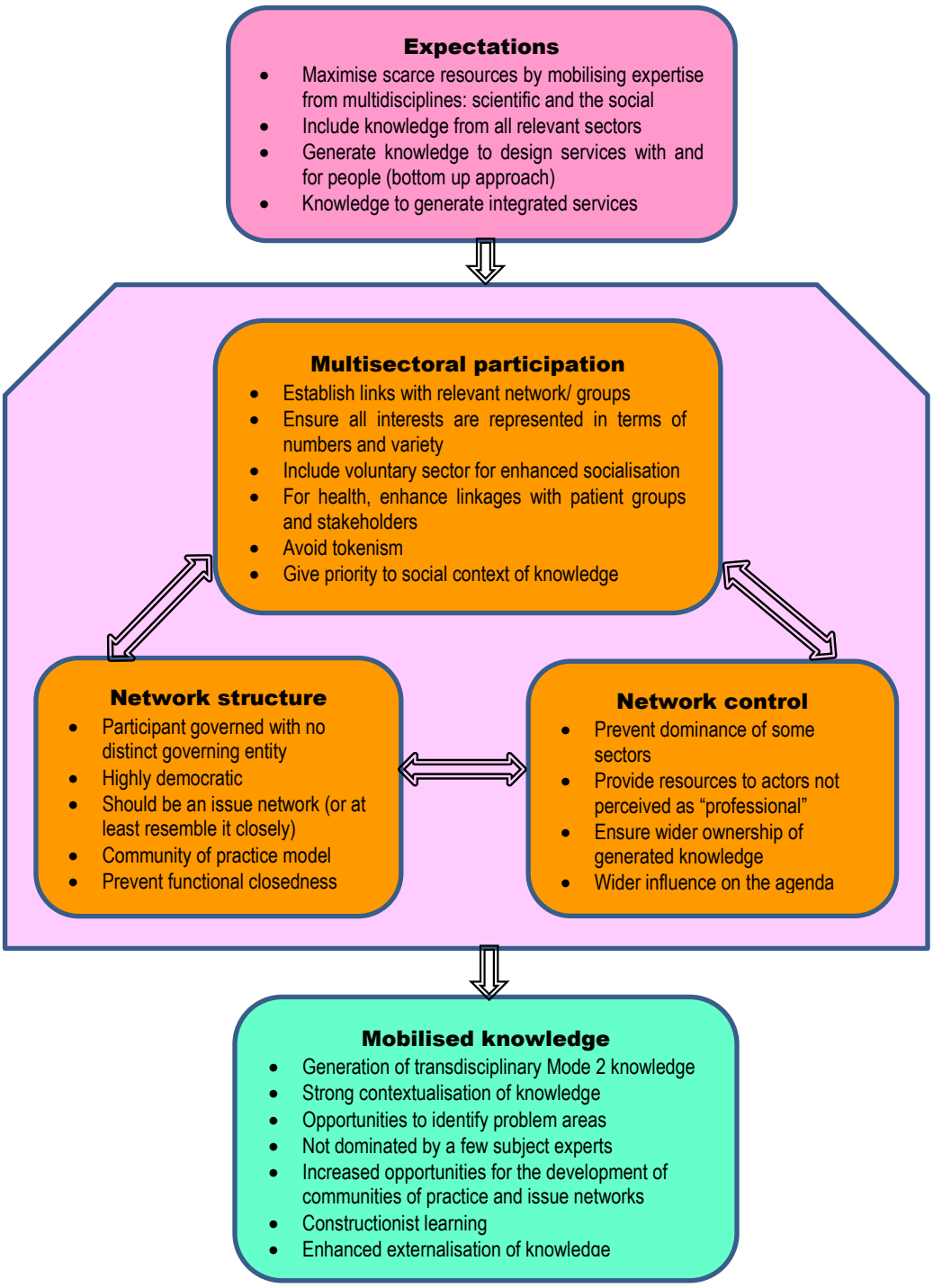

Figure 7.1 Recommendations for multisectoral knowledge mobilising networks

7.4 Limitations of the study

The key themes of this study emerge from the study of a single network and its subsidiary project and stakeholder groups. Examination of a single network is a limitation of this study. It might have been useful to extend this study to include other networks that are expected to generate knowledge through multisectoral collaboration to provide a comparative account. While the themes emerging from this study – multisectoral collaboration, network structure and network control in the context of knowledge mobilisation – are likely to remain prominent in the study of other networks, it is possible that more complex themes associated with these interactions might emerge in a future study. It is also important to note that the study did not evaluate the actual outputs emerging from the network nor how these outputs were being received in terms of them having an influence on policy and practice.

Another likely limitation could be my insider position; being on the staff of the organisation which hosted ScotPHN. The motivation behind the choice of the research topic arose from my own professional practice which involved being a participant of a number of specific public health networks. However, in spite of ScotPHN being hosted by the organisation that I worked for, this network was relatively outside the host organisation as it had its own funding and management structure which has been discussed earlier in Chapter 3, (section 3.4). Nevertheless I was conscious that I was researching within familiar settings and with peers as subjects. These issues have been discussed in detail in Chapter 4 where I set out my position and the steps I took to reduce any potential bias.

7.5 Recommendations for future study

Future studies may like to focus on some of the following aspects of knowledge mobilising multisectoral networks.

- Examine other networks in a manner similar to that of this study. In particular studies could include networks that are perceived to be relatively more multidisciplinary and are regarded as generating contextualised and Mode 2 knowledge through close links with public and other stakeholders.
- A unified study that examines networks from distinctly different arenas, such as public services, academia and industry could provide new knowledge on collaborative knowledge mobilisation.
- This study found that the network is often controlled by those with resources. In this respect it might be interesting to examine the role and the manner in which research and other knowledge mobilising collaborations are funded. The expectations from funders (government or directly from the public) are likely to have an impact on knowledge generation.
- Future studies could focus on specific phenomena linked to knowledge mobilisation networks such as network closedness, contextualisation of knowledge and ability to externalise knowledge.

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APPENDIX A

Healthcare policies and their advocacy of partnership working

Policy document	Key health improvement messages	Actions recommended
WHO (1998)	• To promote and protect people's health throughout their lives • To reduce the incidence of the main diseases and injuries, and alleviate the suffering they cause	• Develop multisectoral strategies to tackle the determinants of health, taking into account physical, economic, social, cultural and gender perspectives, and ensuring the use of health impact assessment • a participatory health development process that involves relevant partners for health at home, school and work and at local community and country levels, and that promotes joint decision-making, implementation and accountability
DOH (2000)	• Remove over-centralisation • Empower patients	• Involve social services and private providers • New powers for patients • Set targets on health inequalities
Scottish Office (1999)	• Addressing social gradients of health • Building partnership with local government and voluntary sector and communities • Addressing inequalities on the ground • Promoting access to good health	• Develop cross-departmental approach to health • Stimulate pro-health culture e.g. through collaboration, media etc. • Health boards to lead and promote health promotion and reduce health inequalities. • Boards to support other agencies such as councils that are working to improve health
Scottish Executive (2000)	• Give patients a stronger voice • work in partnership, across traditional boundaries and across a range of different organizations • tackling inequalities between rich and poor, including those who are currently excluded, and bringing about social justice. • Improving patient experience	• NHS Health Boards and Local Authorities will work together to route money to local communities, with a particular emphasis on Social Inclusion Partnership areas • All NHS Boards to work in partnership with Local Authorities to ensure that integrated independent advocacy services are available to those who most need them • Working in partnership with staff • Specific actions to promote healthy lifestyles • Create Patient Focus Public Involvement framework
Scottish Executive (2003)	• Create a culture of care that is developed and fostered by new partnership between patients staff and government • Focus on health improvement, listening to patients, developing national standards, partnership and empowering staff	• No longer acceptable to have health improvement and promotion as a task only for director of public health. Develop leadership from groups such as Scottish Executives, local authorities, professionals in health, and representative groups in voluntary sector • Partnership integration and redesign (includes public involvement, empowering staff

Policy document	Key health improvement messages	Actions recommended
Scottish Executive (2005)	• Reduce reliance on episodic, acute care in hospitals for treating illness. Move towards a system which emphasises a wider effort on improving health	• Develop model geared towards long term conditions • Develop team based rather than doctor dependent care • Patients to be a partner rather than a passive recipient • Community Health Partnerships to deliver care based on local needs
Scottish Government (2007)	• Tackling health inequality and improving quality of health care and prevent disease. • Move towards public ownership through co-production.	• Develop a collaborative, integrated and partnership approaches • Promote public participation, improve patient experience • Improved engagement with most vulnerable groups • Development of regional managed public health networks to support leadership and professional development of staff working in public health
Scottish Government (2011)	• Preventative measures need to be emphasised to prevent cycle of deprivation and low aspiration to persist. It is estimated that as much as 40 per cent of all spending on public services is accounted for by interventions that could have been avoided by prioritising a preventative approach • The public service system is often fragmented, complex and opaque, hampering the joint working between organisations which the commission considers to be essential • Collaboration between organisations and partnerships with people and communities - are making a real difference and can provide positive models for the future. However, these are isolated examples.	• Introducing a new set of statutory powers and duties, common to all public service bodies, focussed on improving outcomes. These new duties should include a presumption in favour of preventative action and tackling inequalities • Recognise that effective services must be designed with and for people and communities - not delivered 'top down' for administrative convenience • Implementing new inter-agency training to reduce silo mentalities • maximise talents and resources, support self-reliance, and build resilience